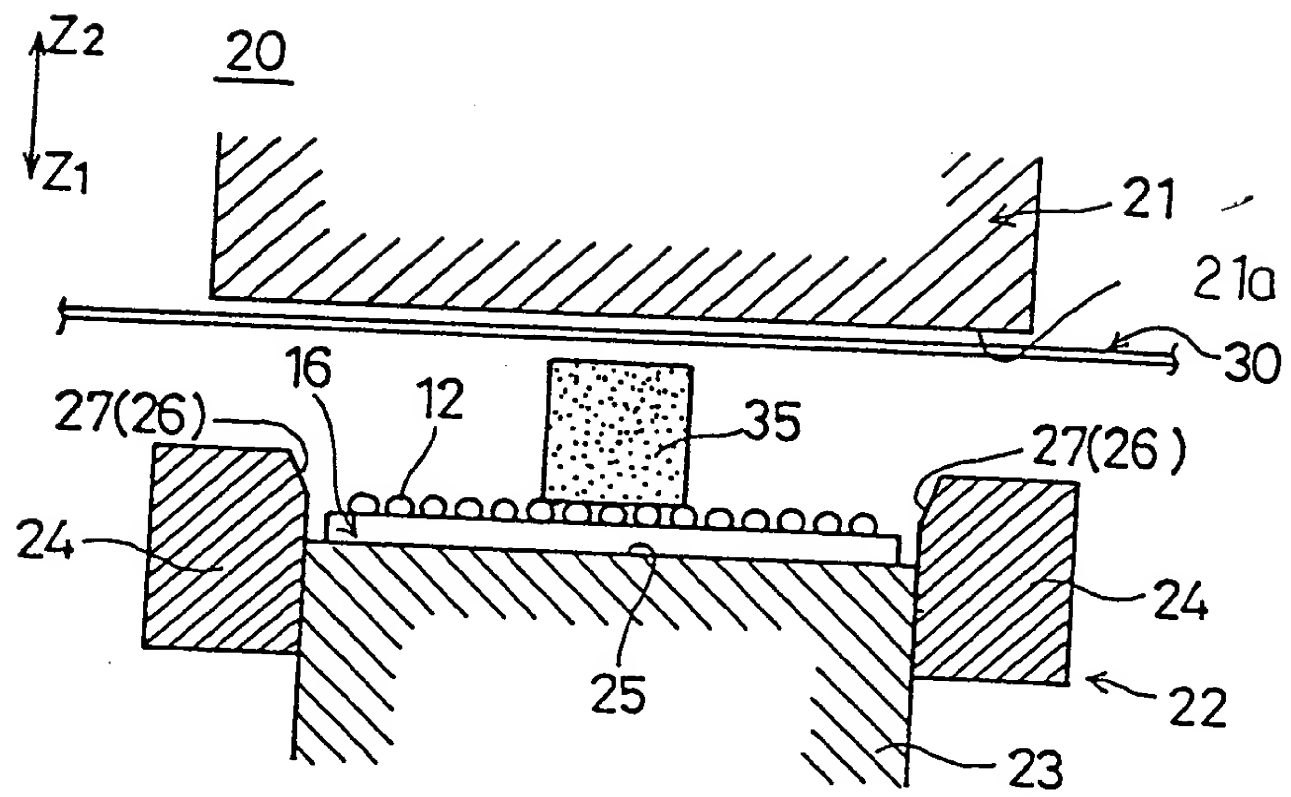


09766556-061901

Fig. 1



09766656-061901

Fig. 1A

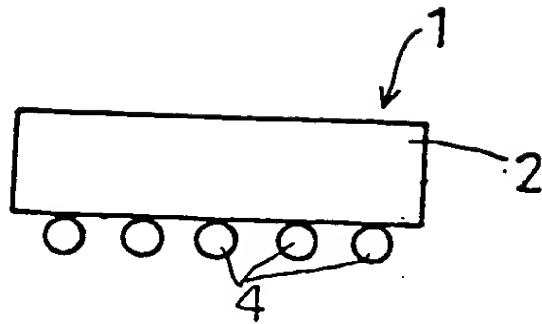


Fig. 1B

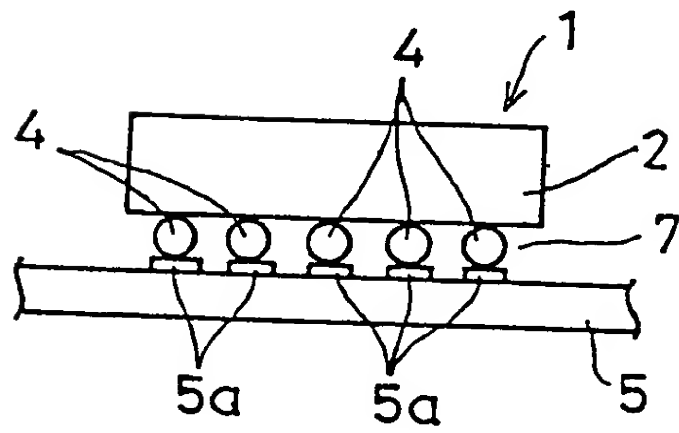
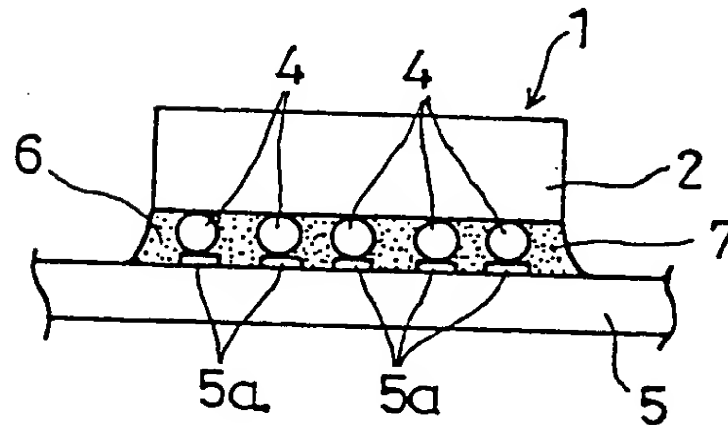
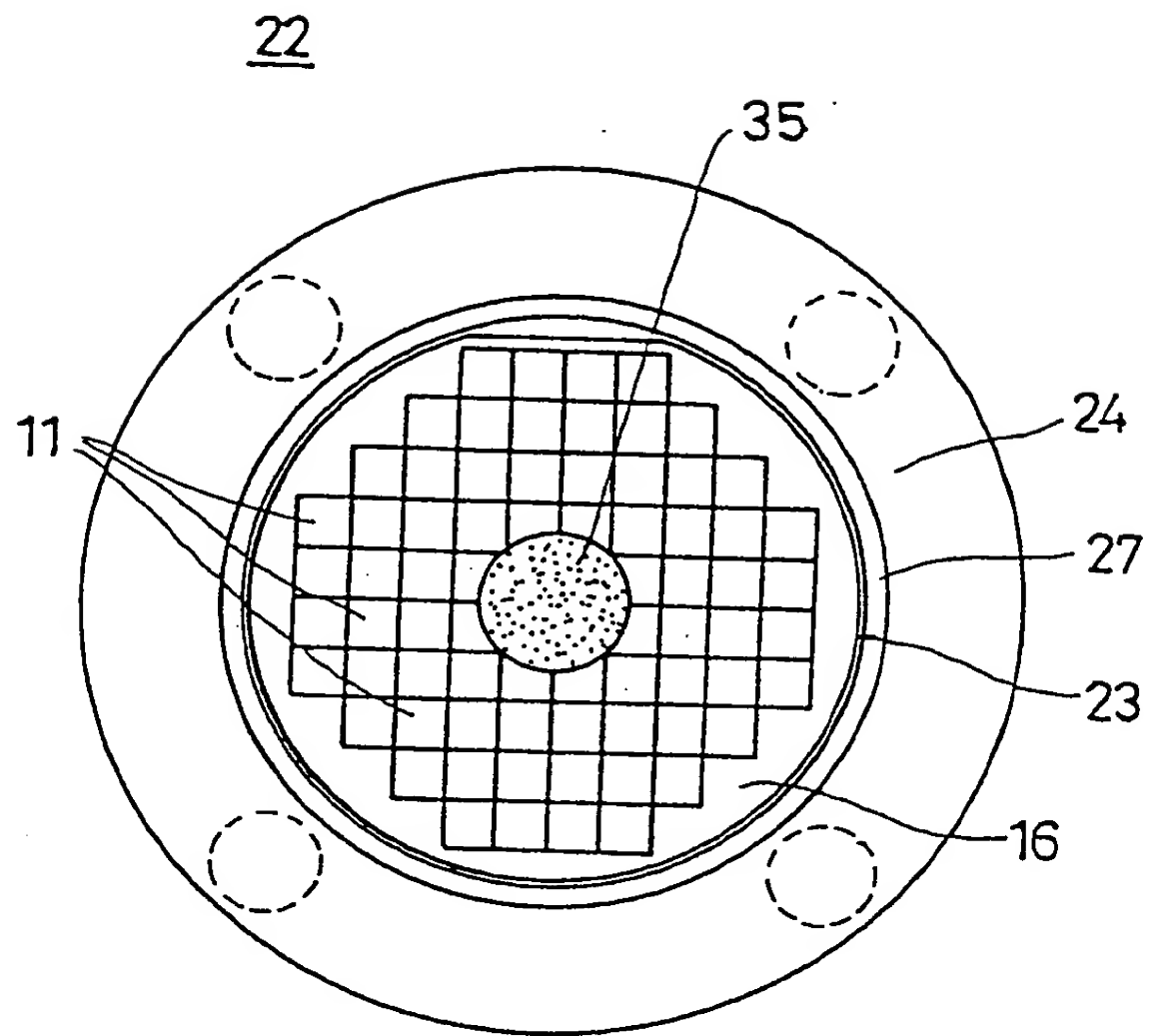


Fig. 1C



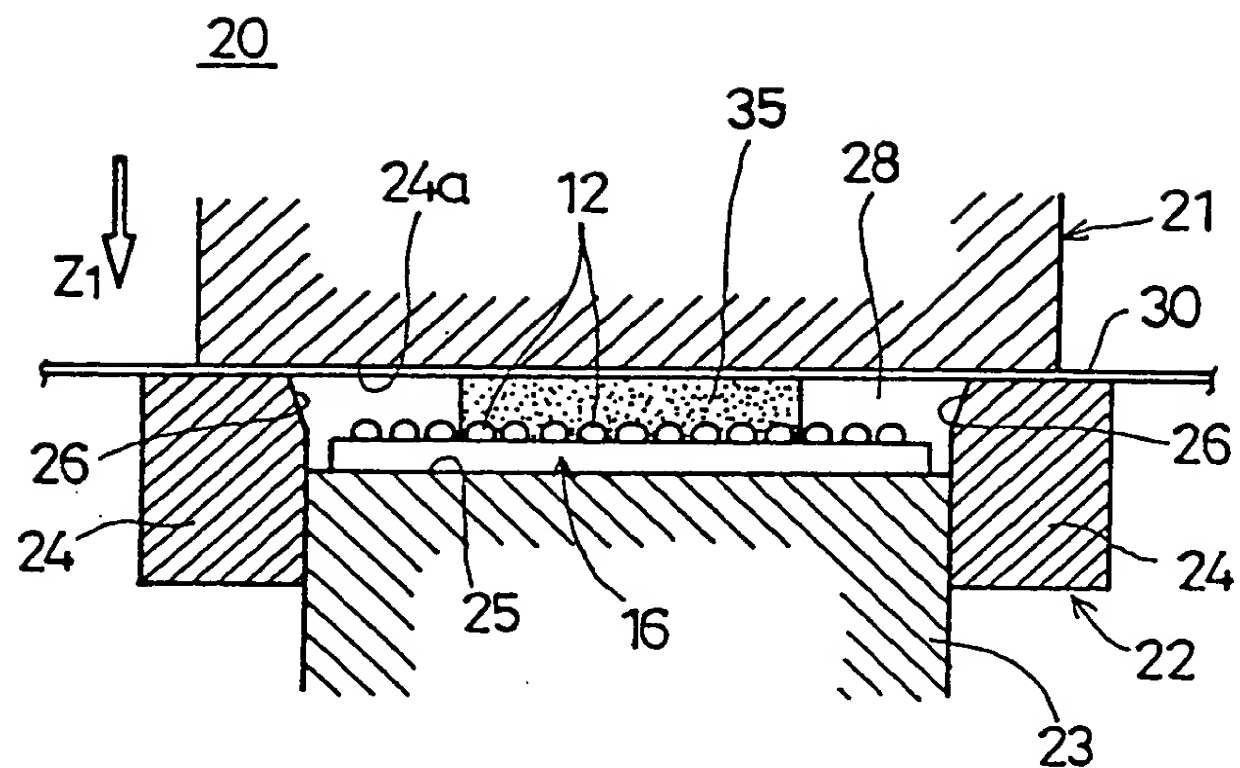
09766655-061901

Fig. 2

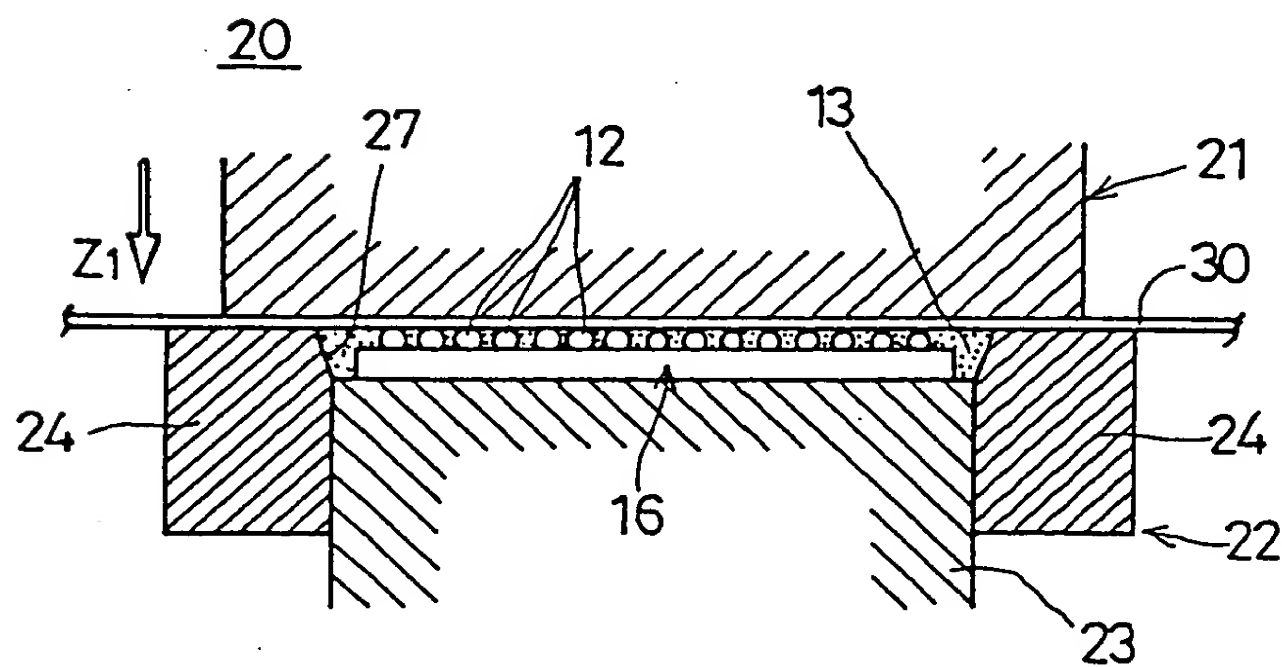


4 / 1 3 1

**Fig. 3**

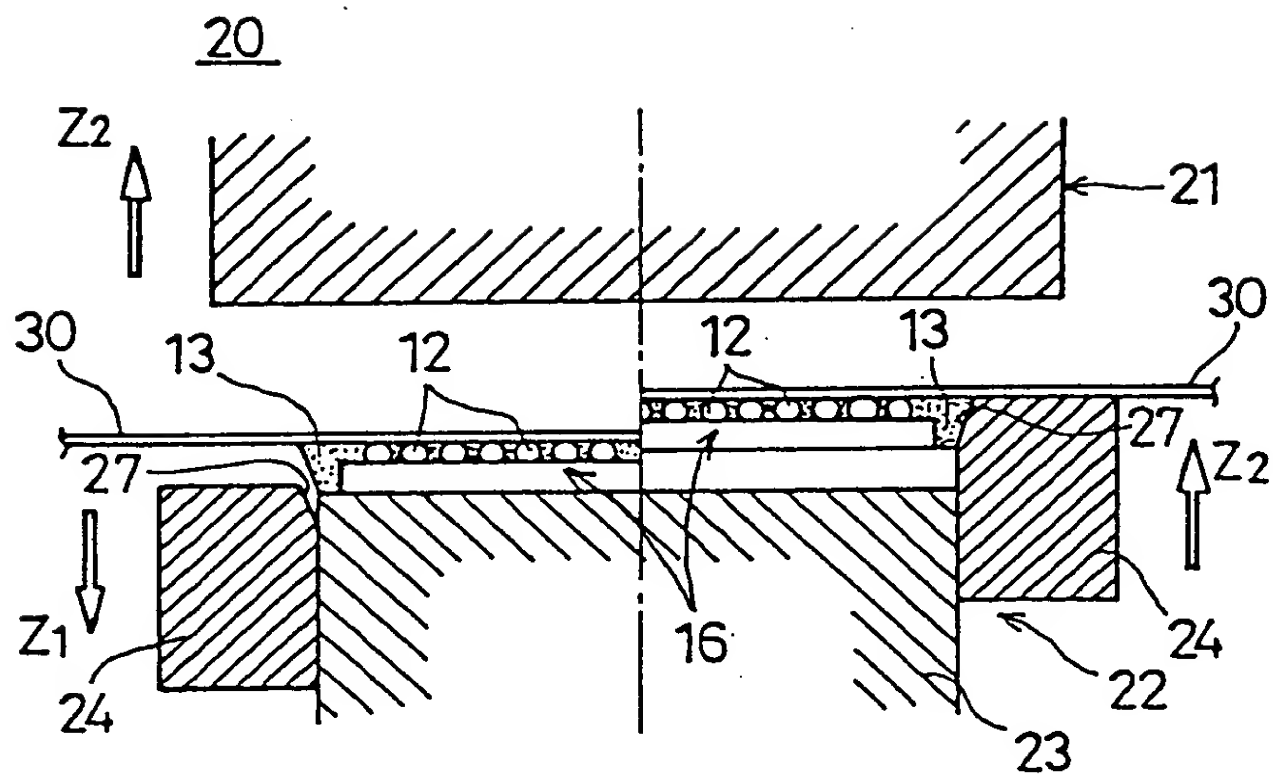


**Fig. 4**

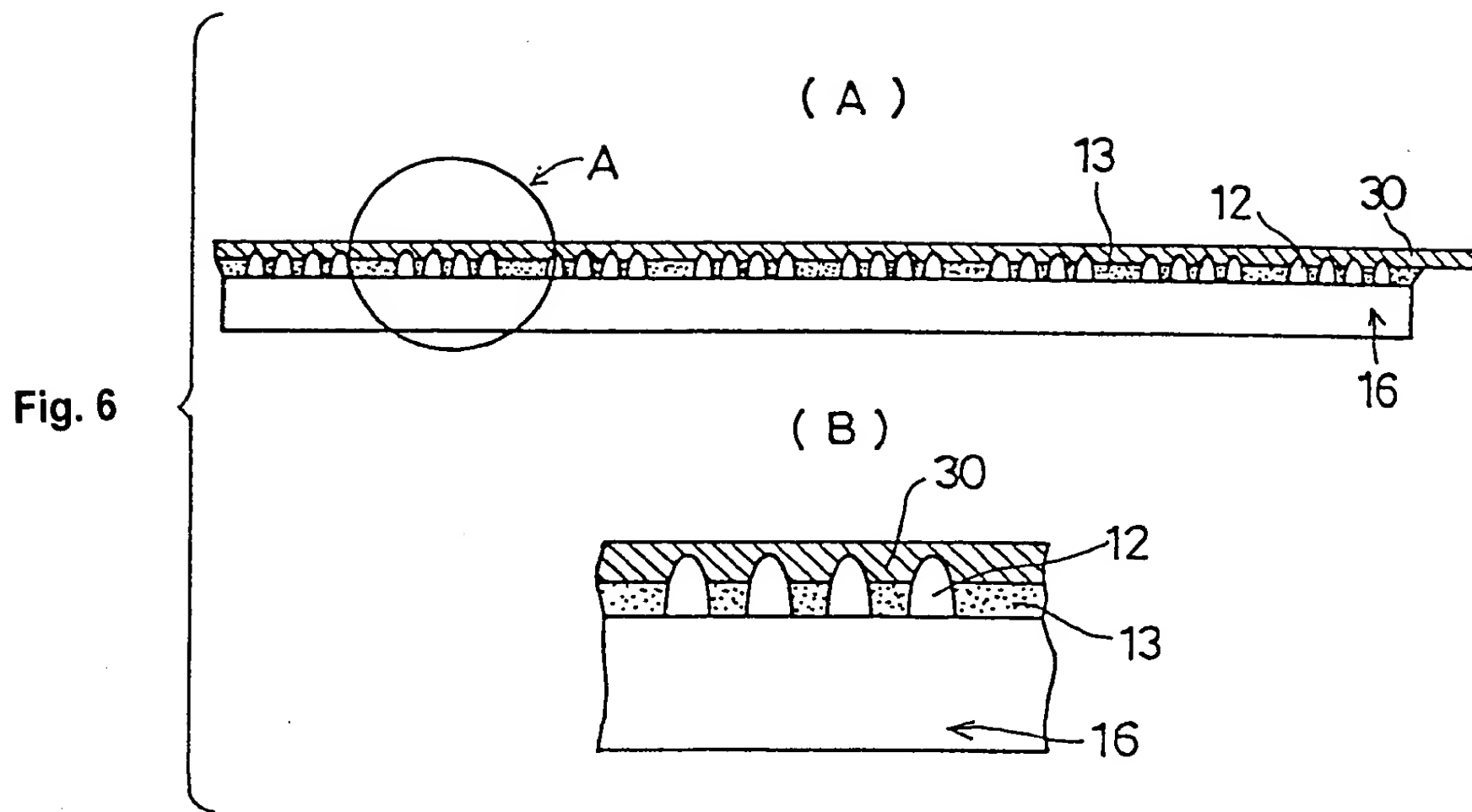


09766556-061901

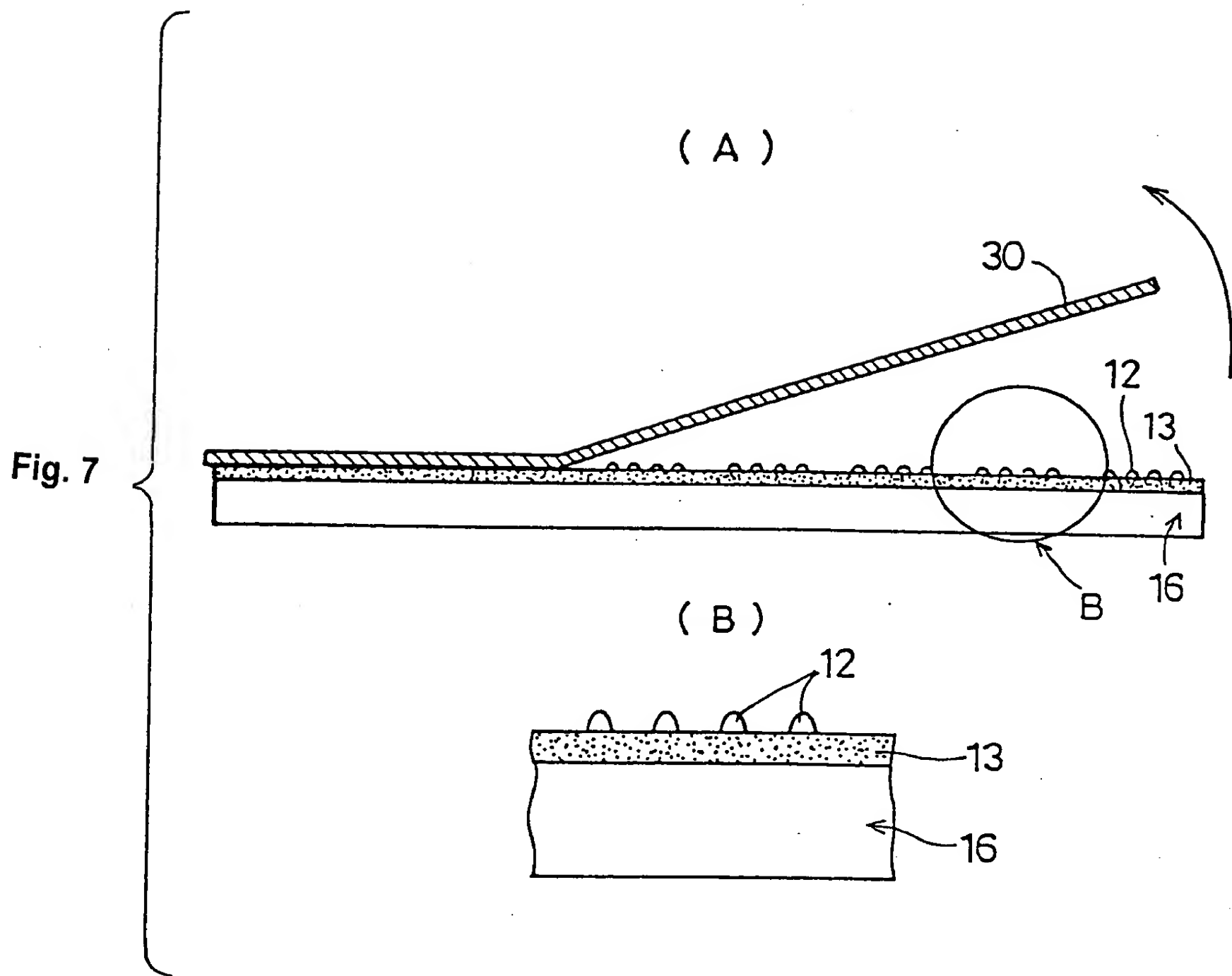
Fig. 5



09766655-061901



09766655-051901



0976656, 061904, 061904, 061904

Fig. 8

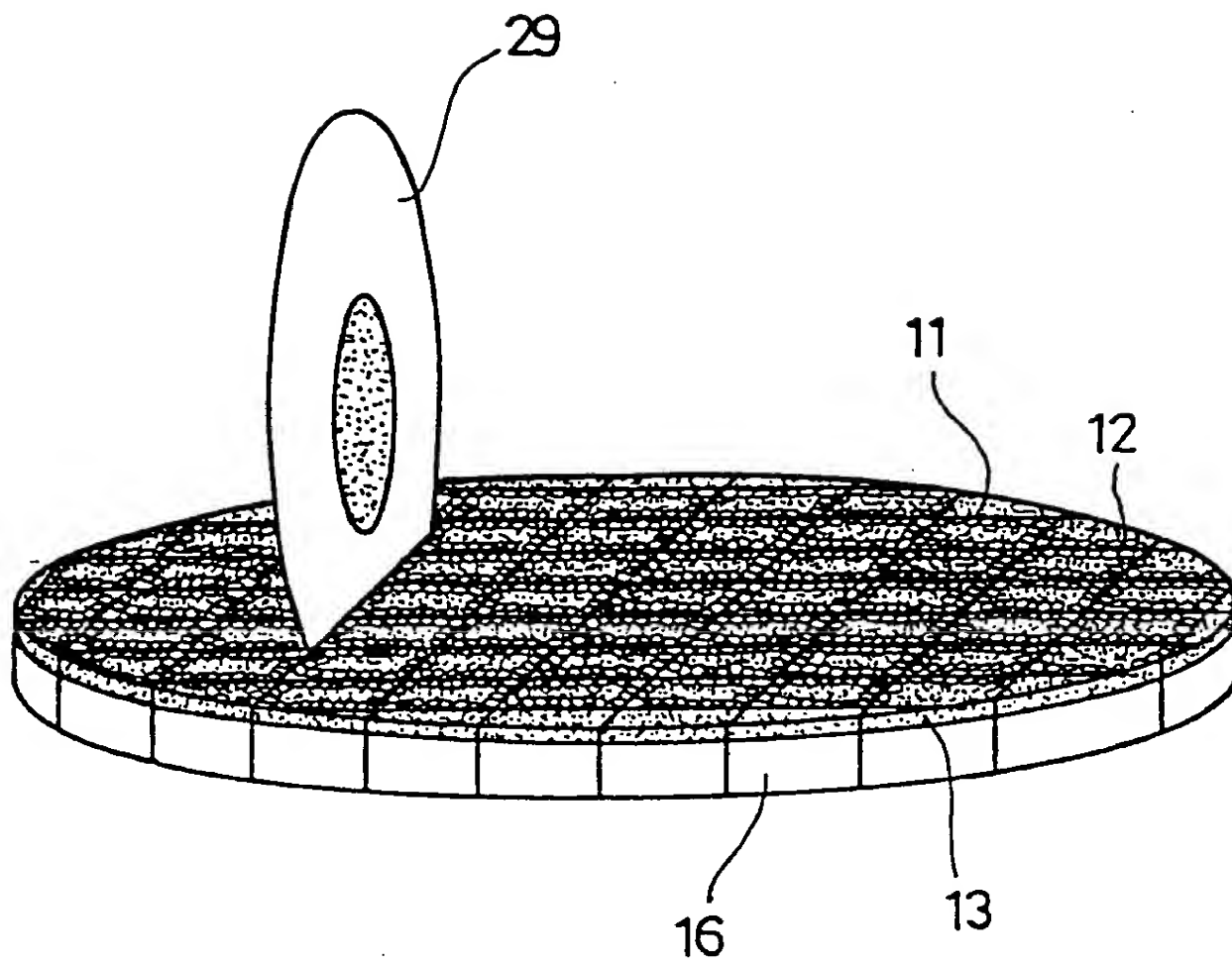




Fig. 9

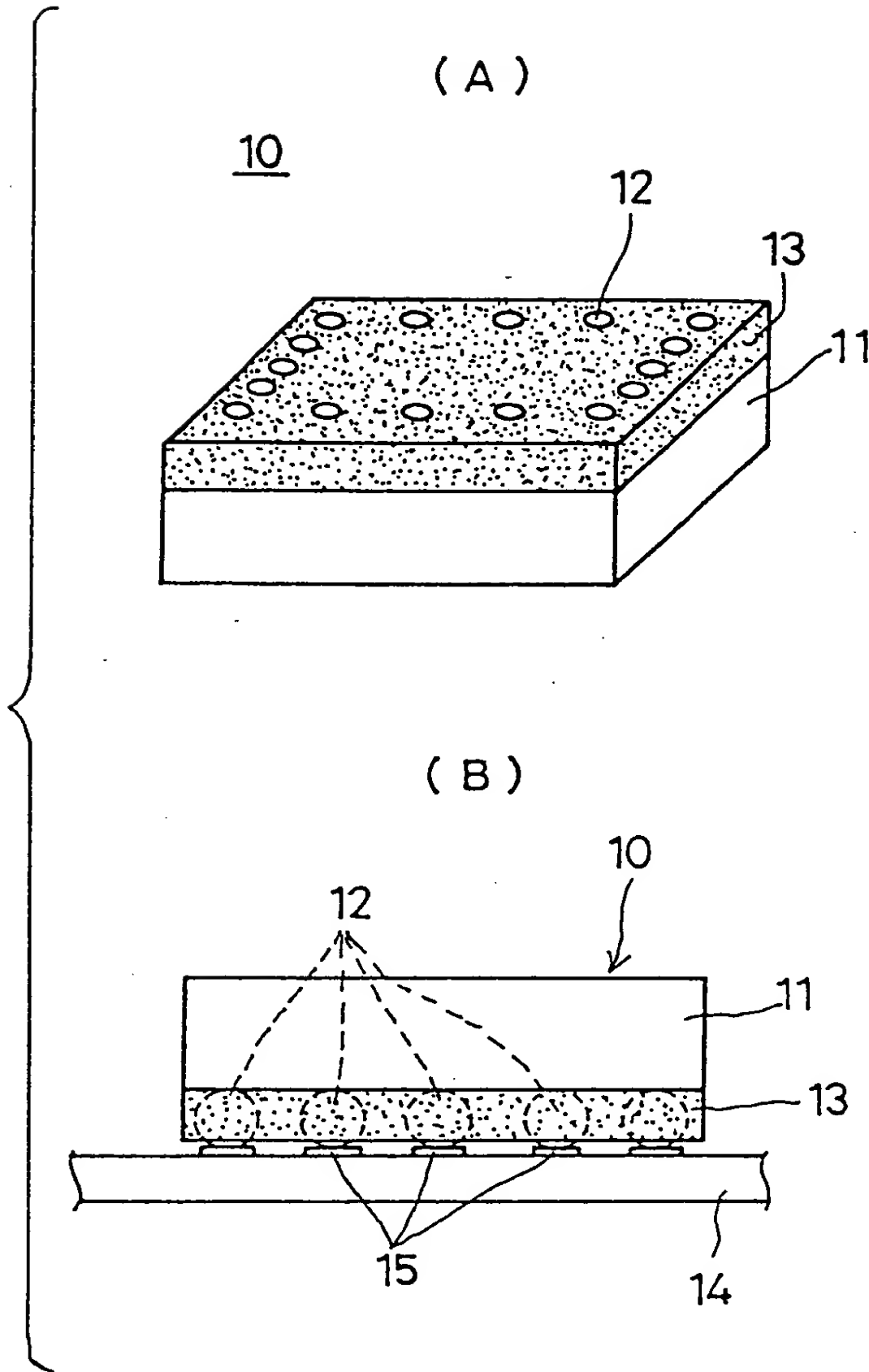


Fig. 10

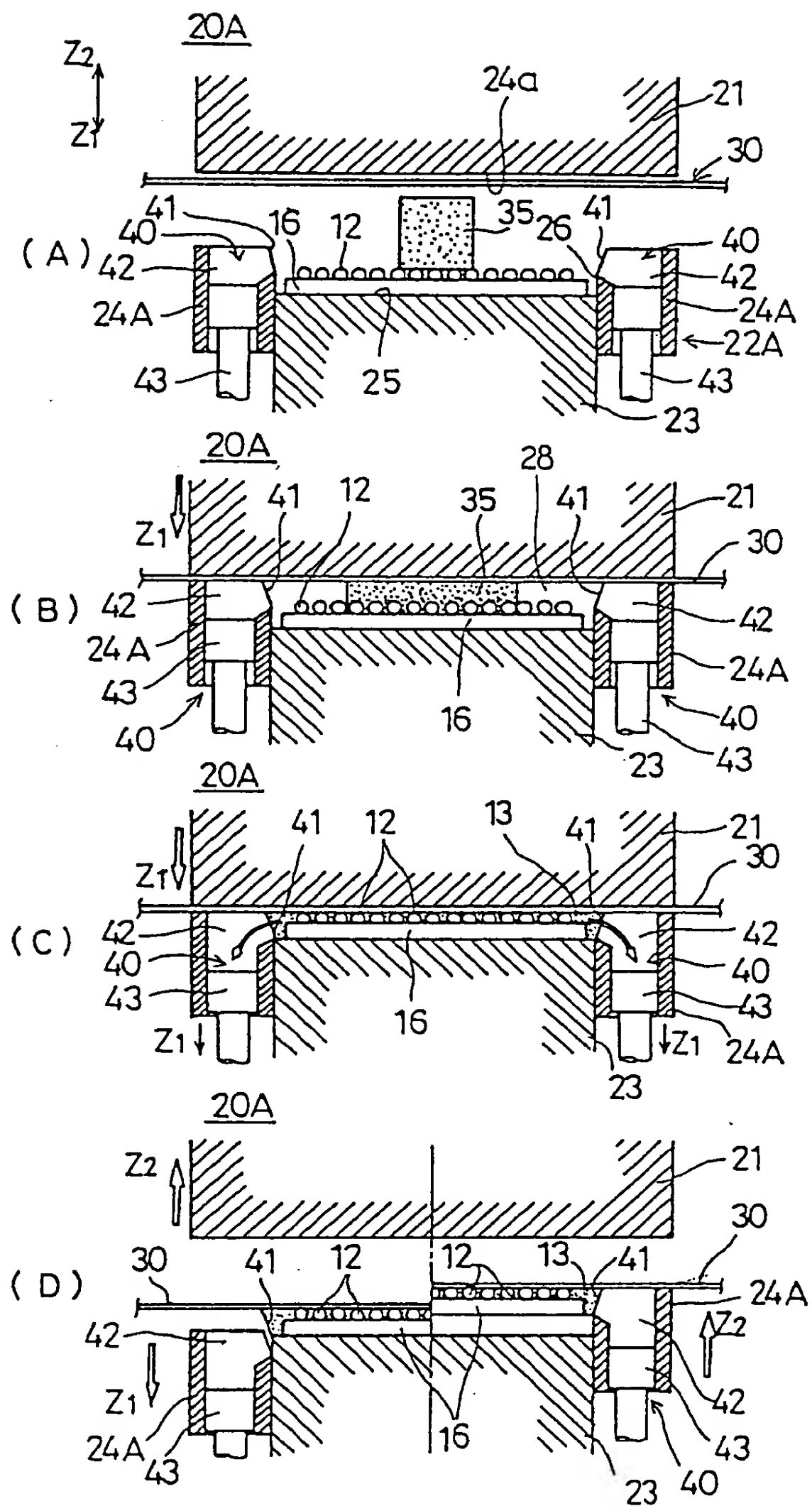


Fig. 11

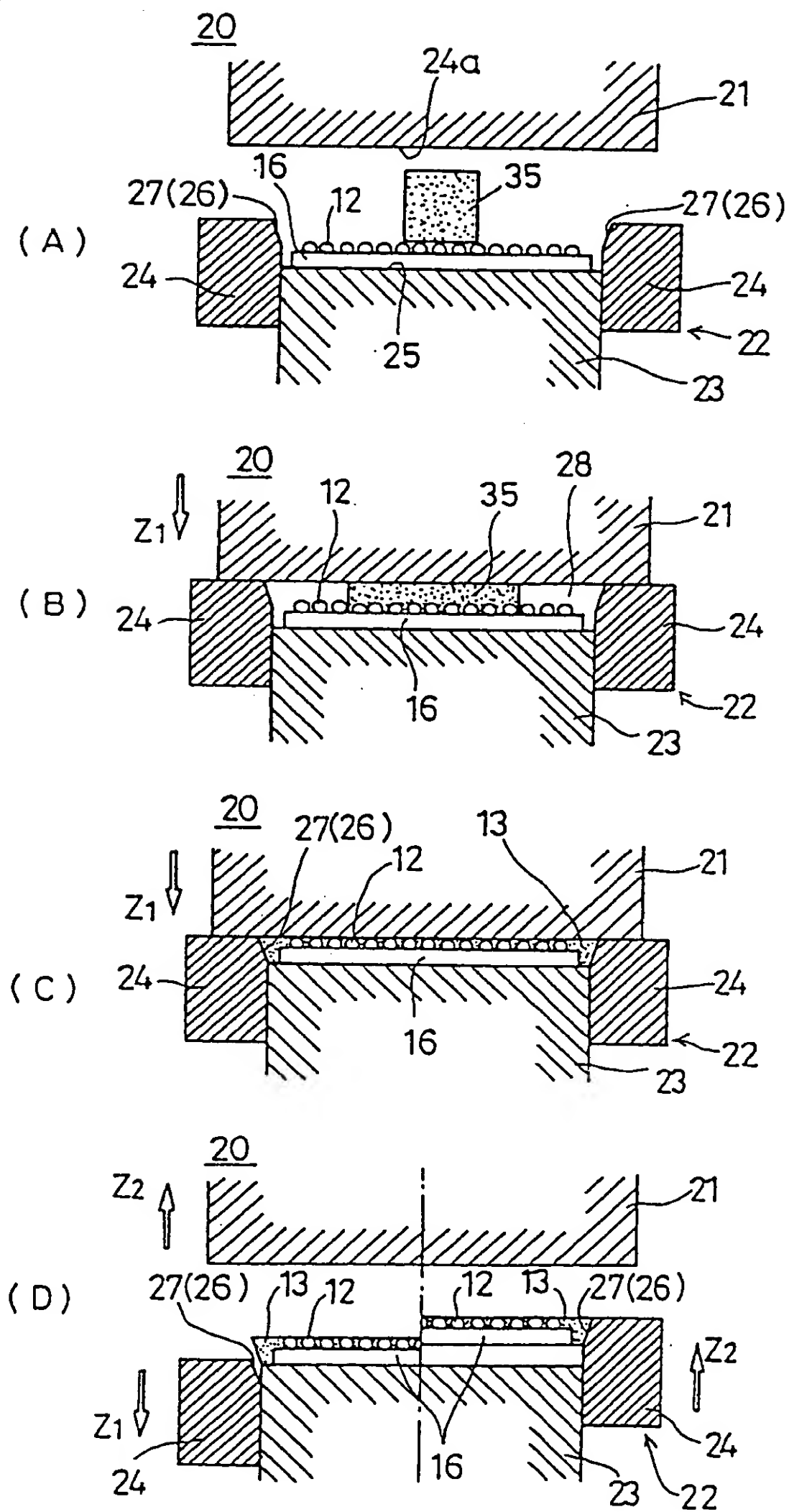


Fig. 12

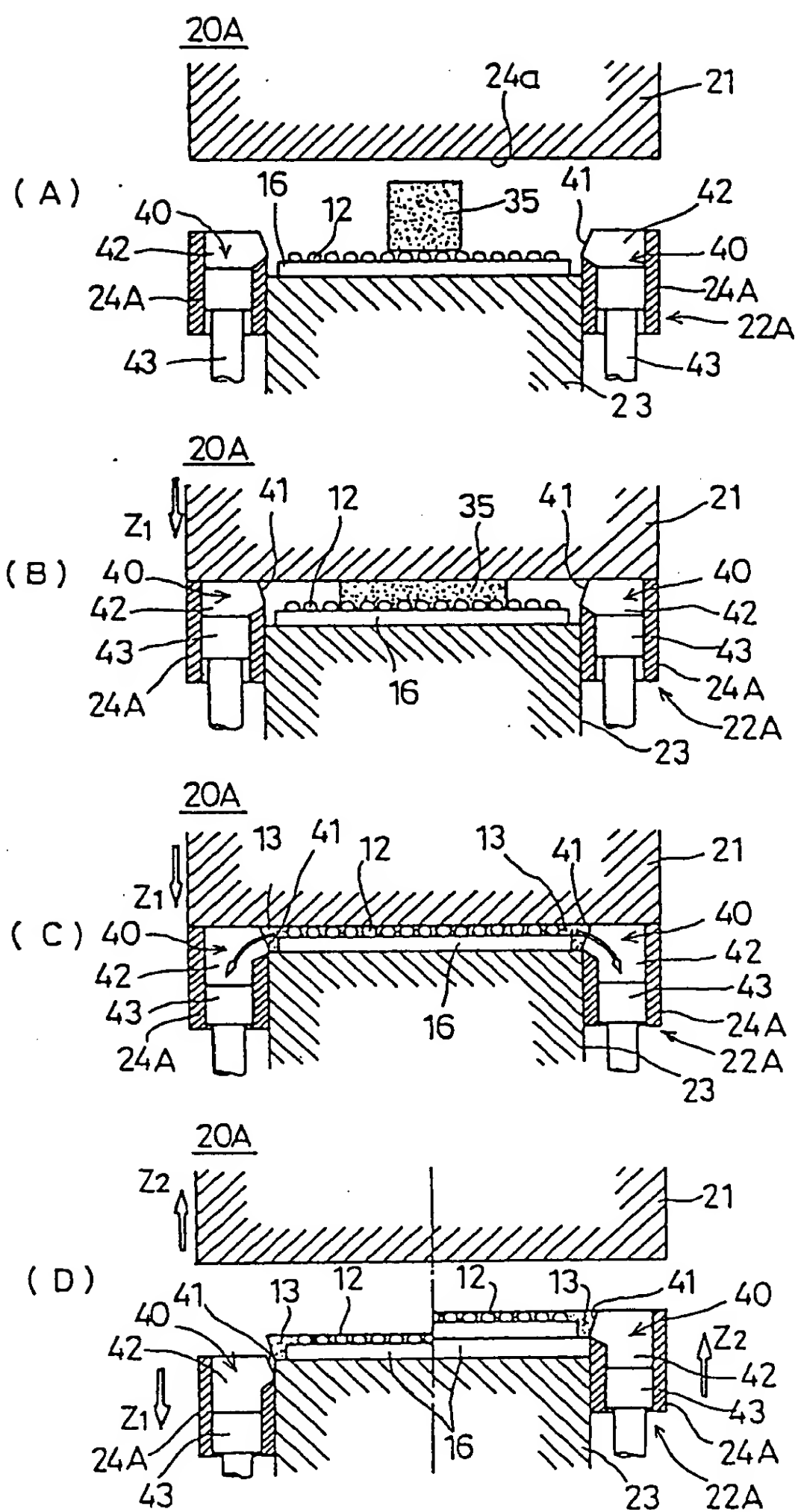
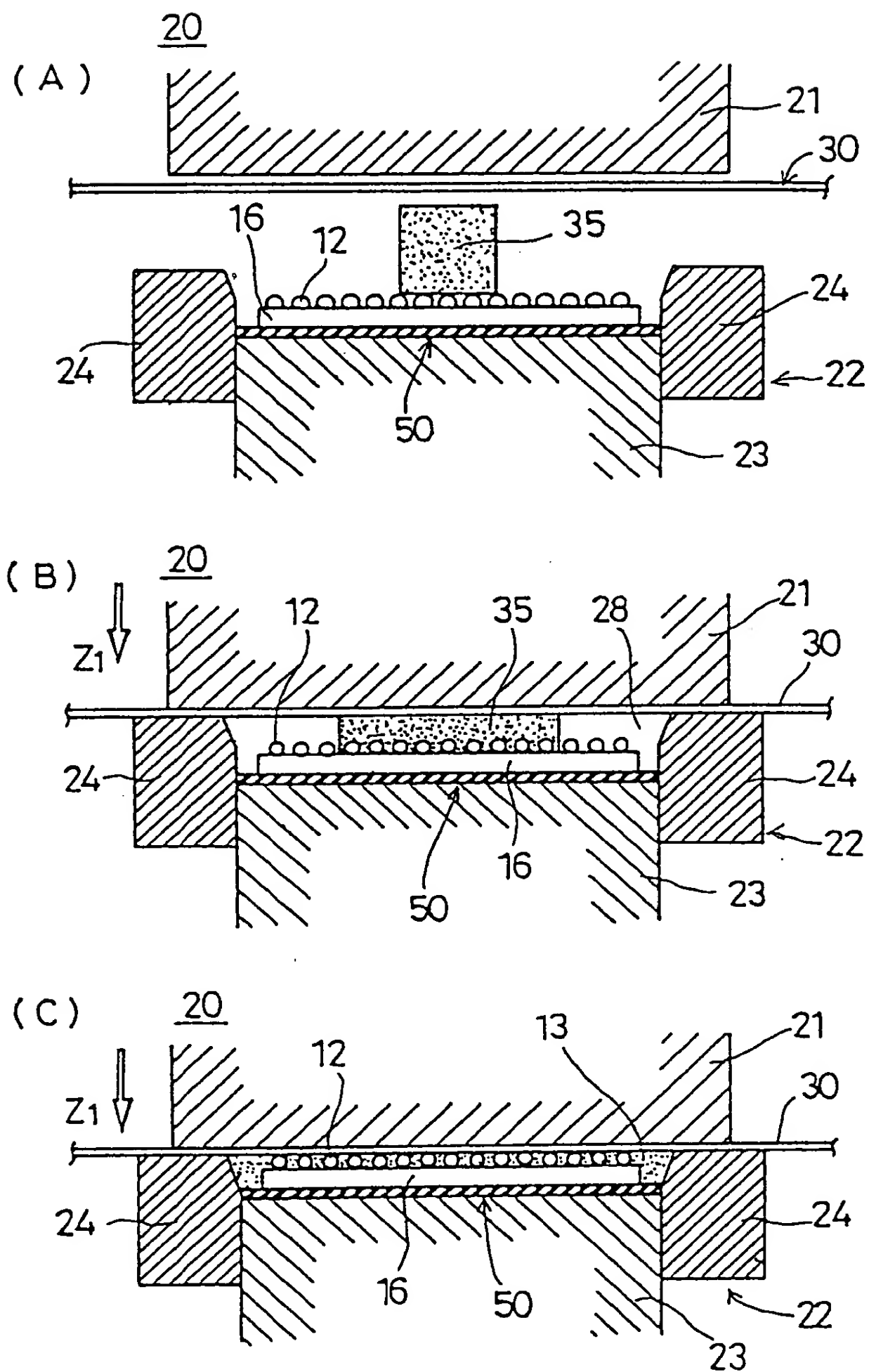


Fig. 13



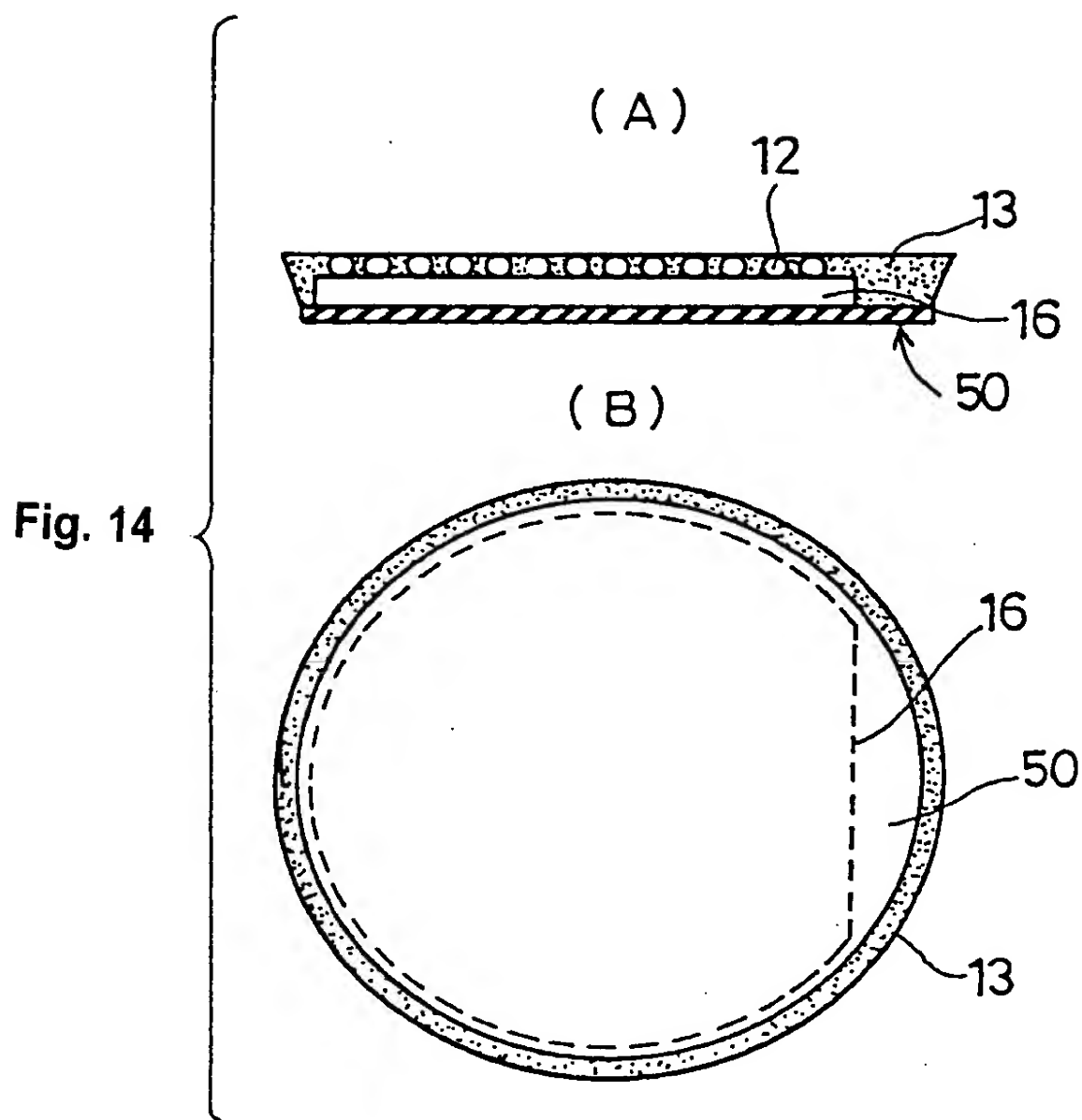


Fig. 15

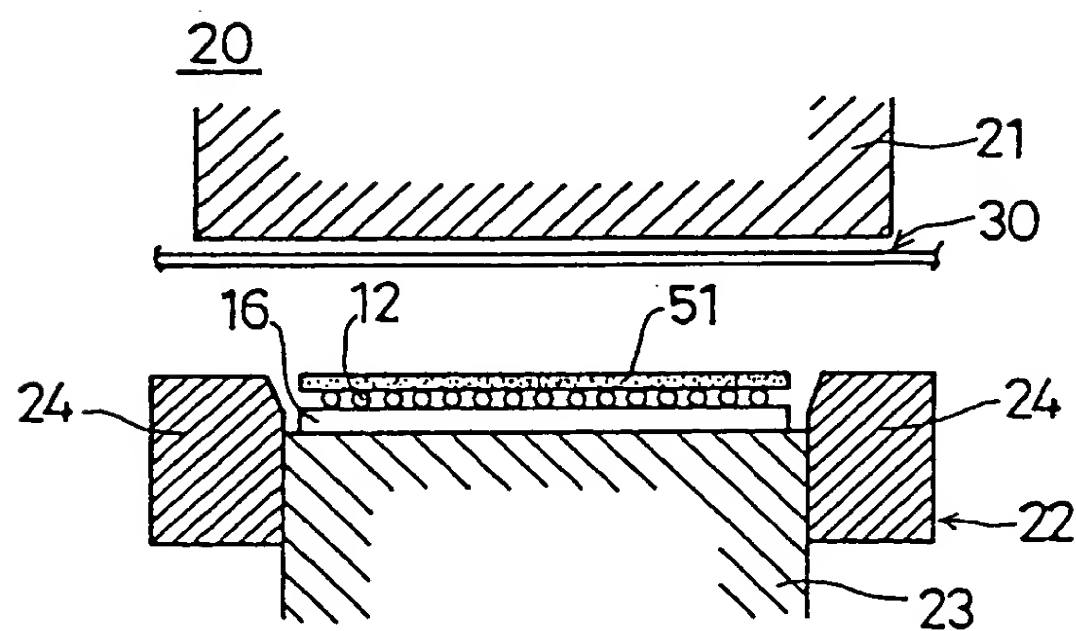


Fig. 16

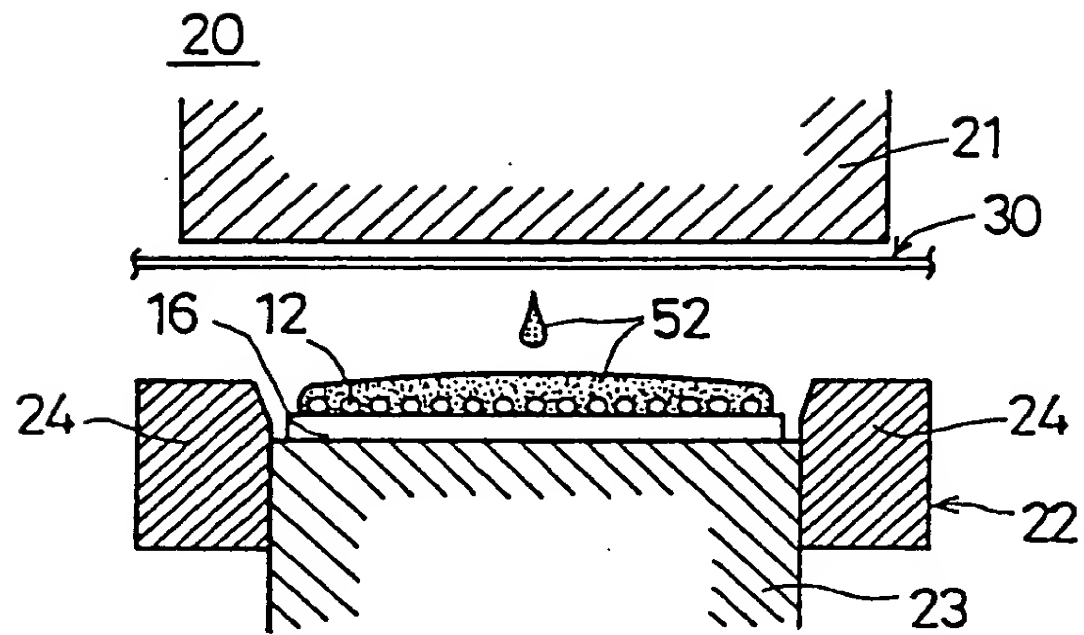
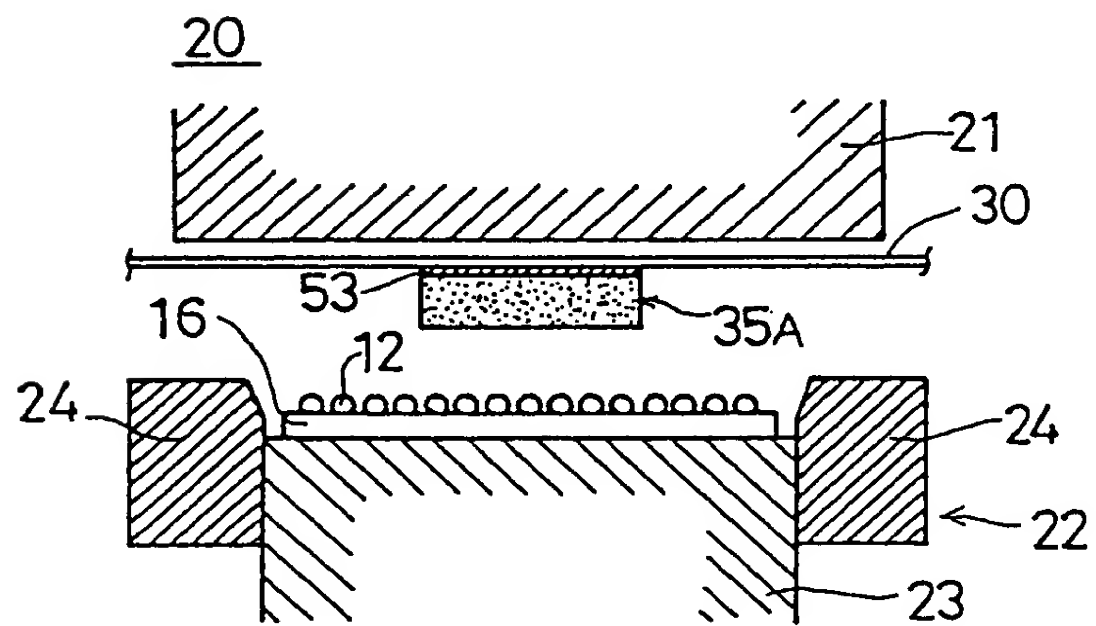


Fig. 17



**Fig. 18**

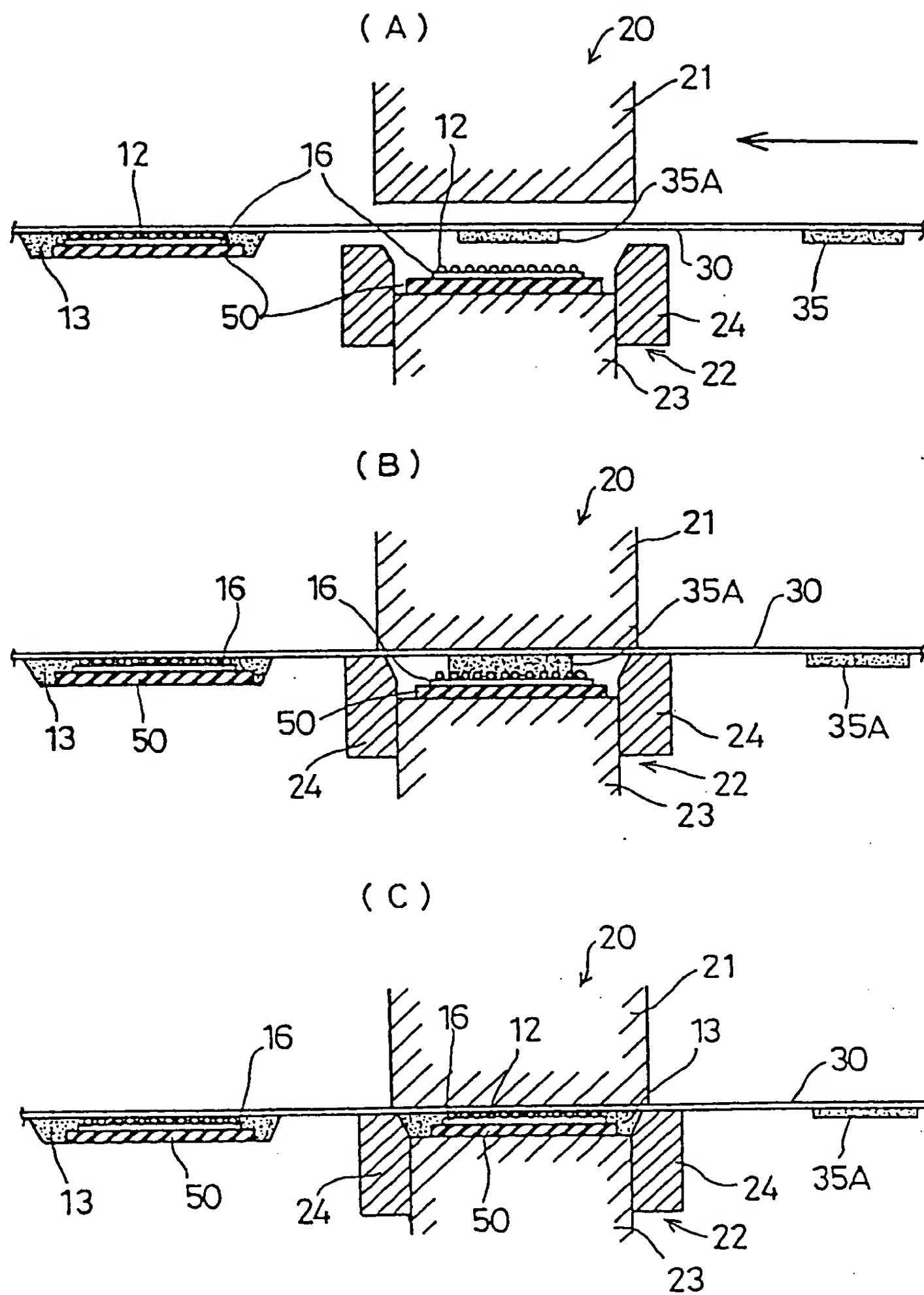




Fig. 19

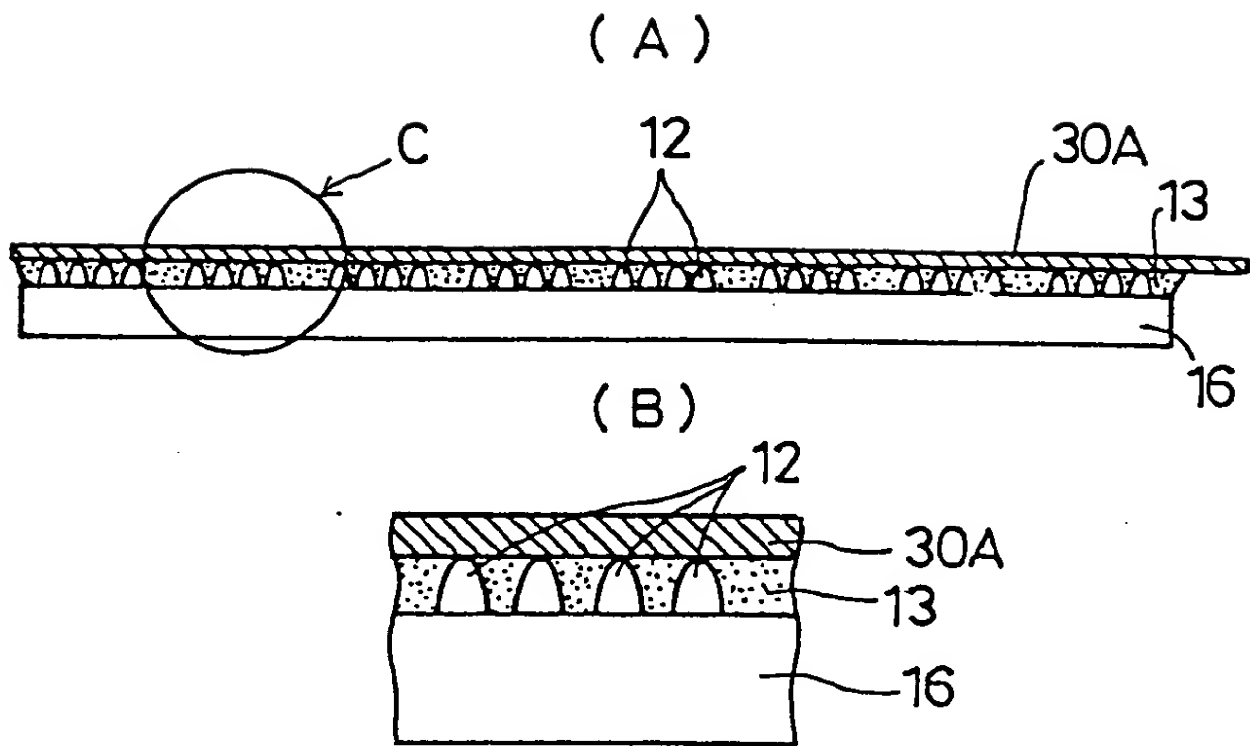
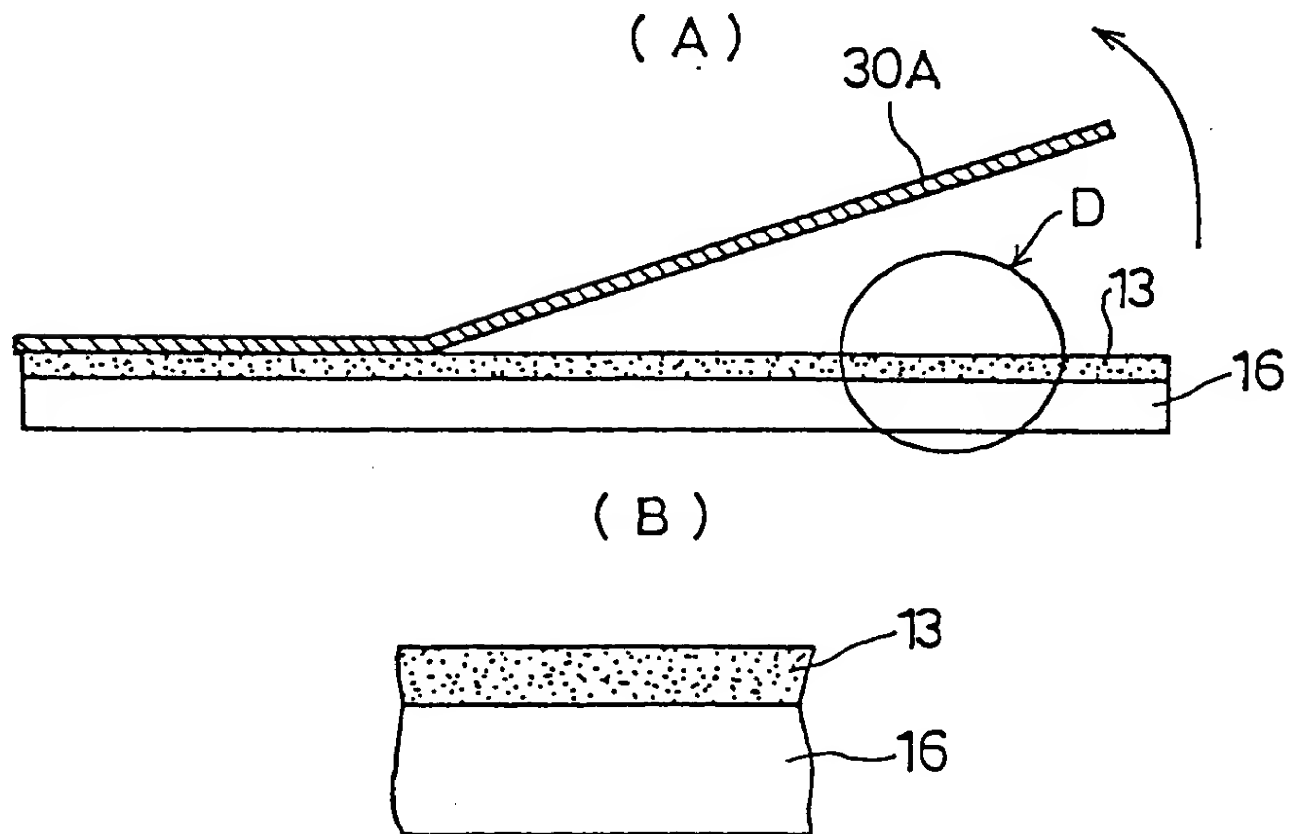
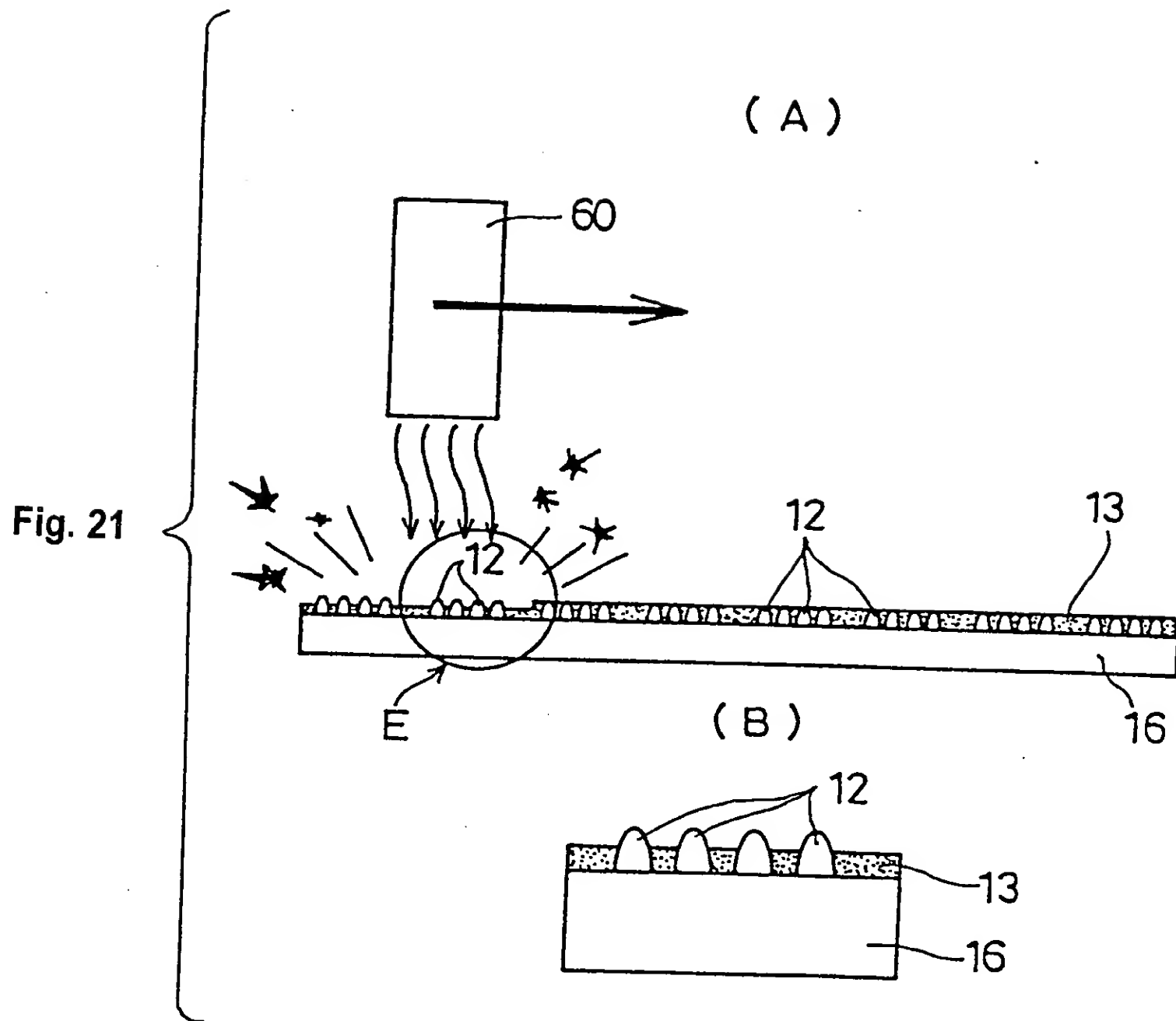


Fig. 20



09765656-054901



0976655-06.1901

Fig. 22

20C

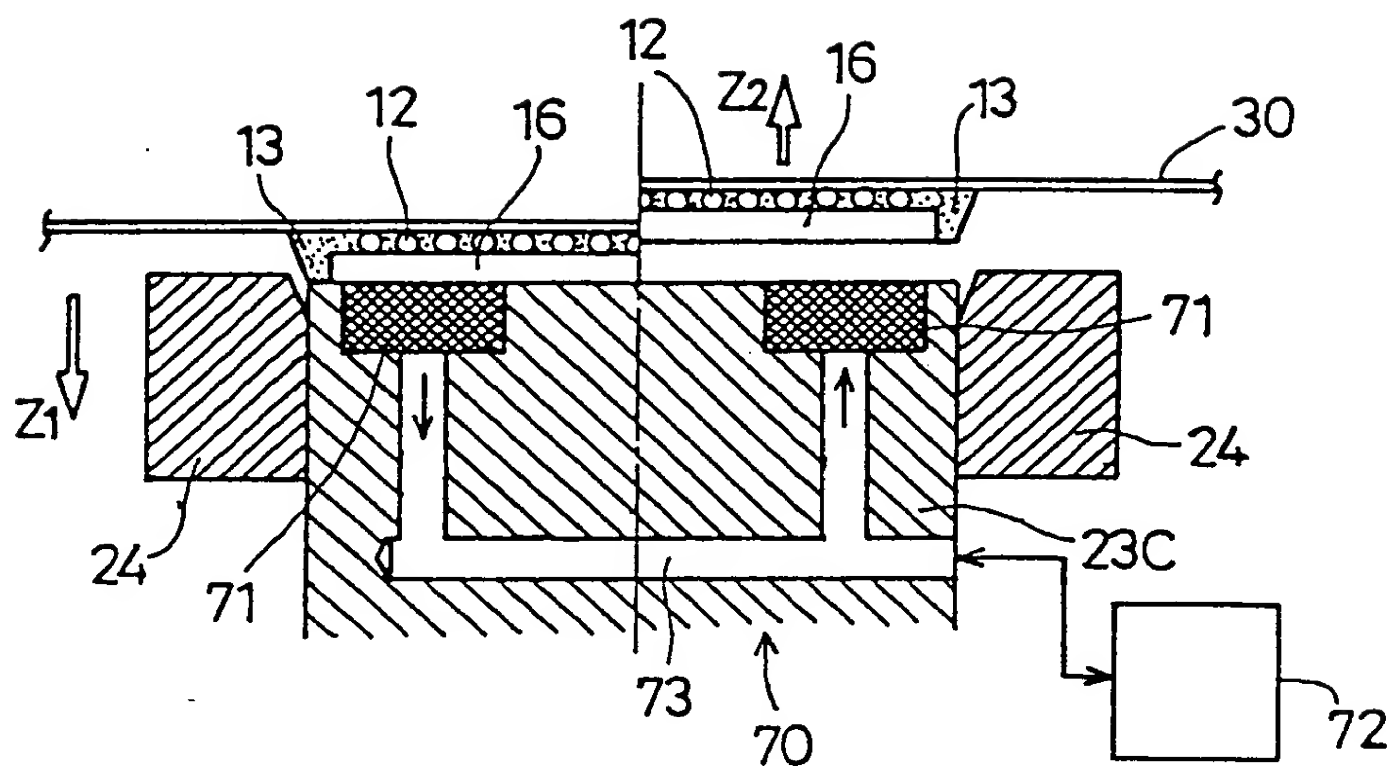


Fig. 23

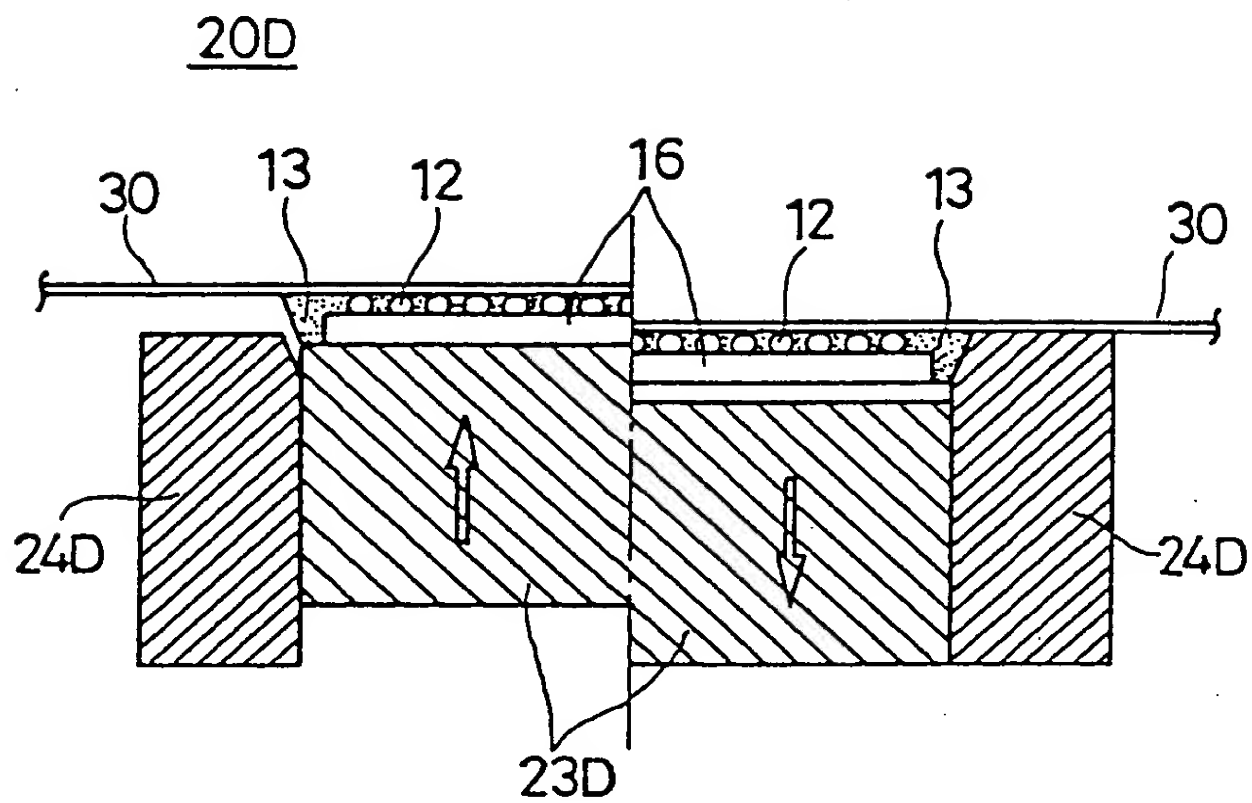
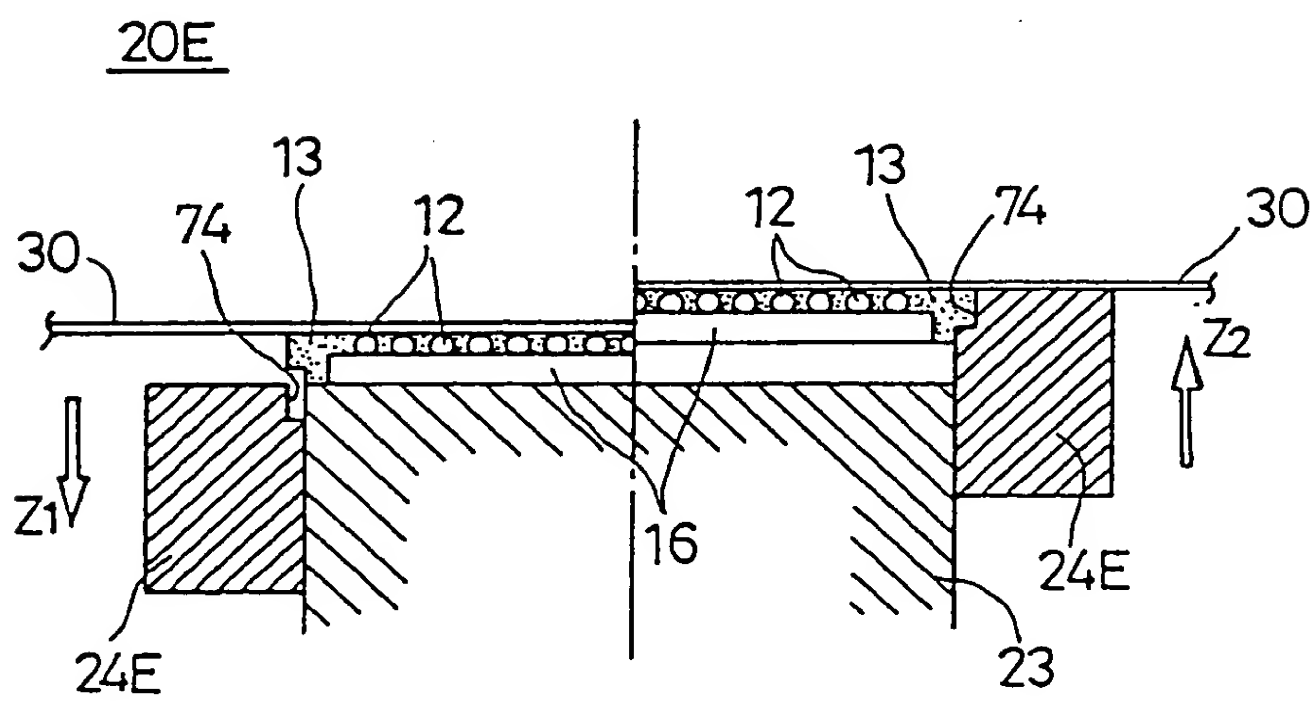


Fig. 24



0976655-061901

Fig. 25

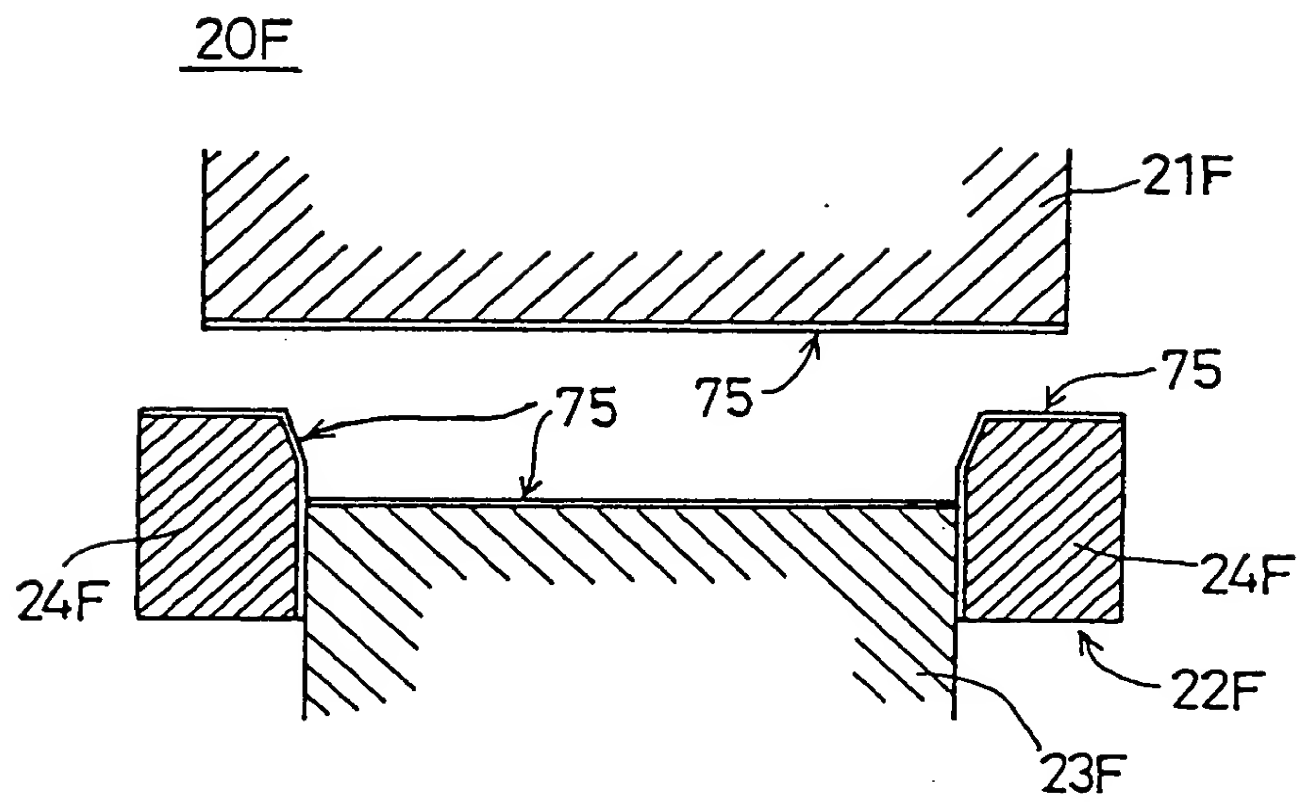
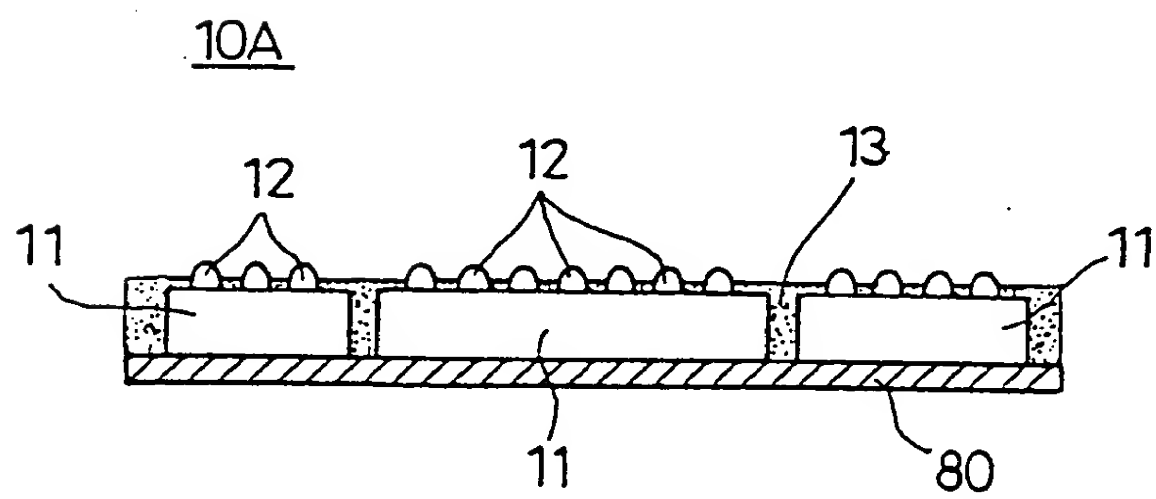


Fig. 26



09766655-061901

Fig. 27

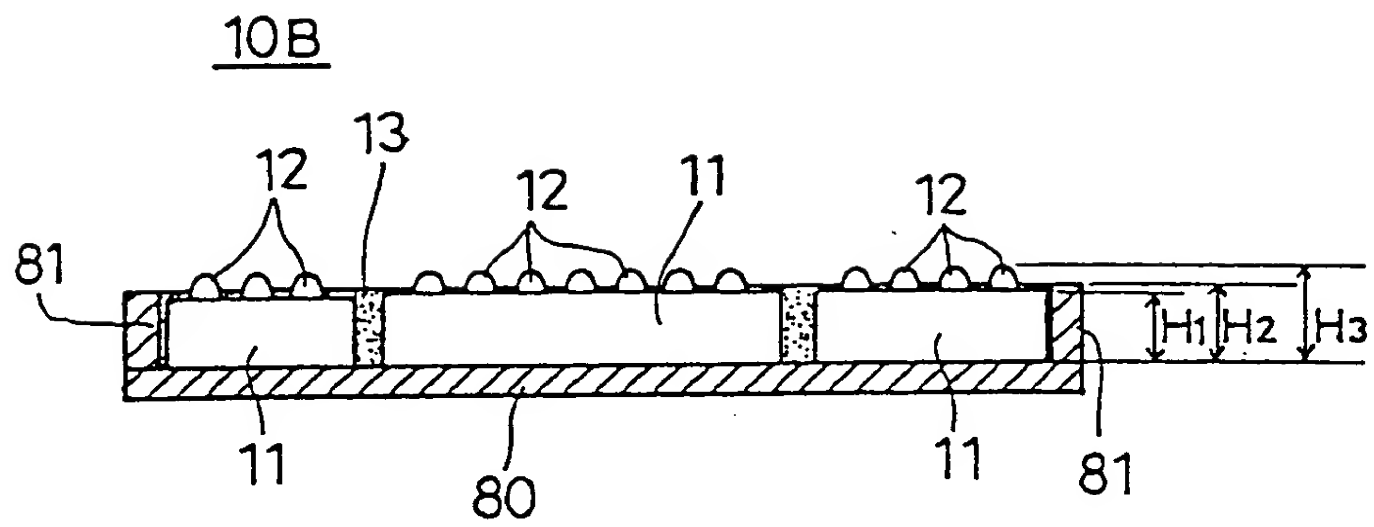


Fig. 28

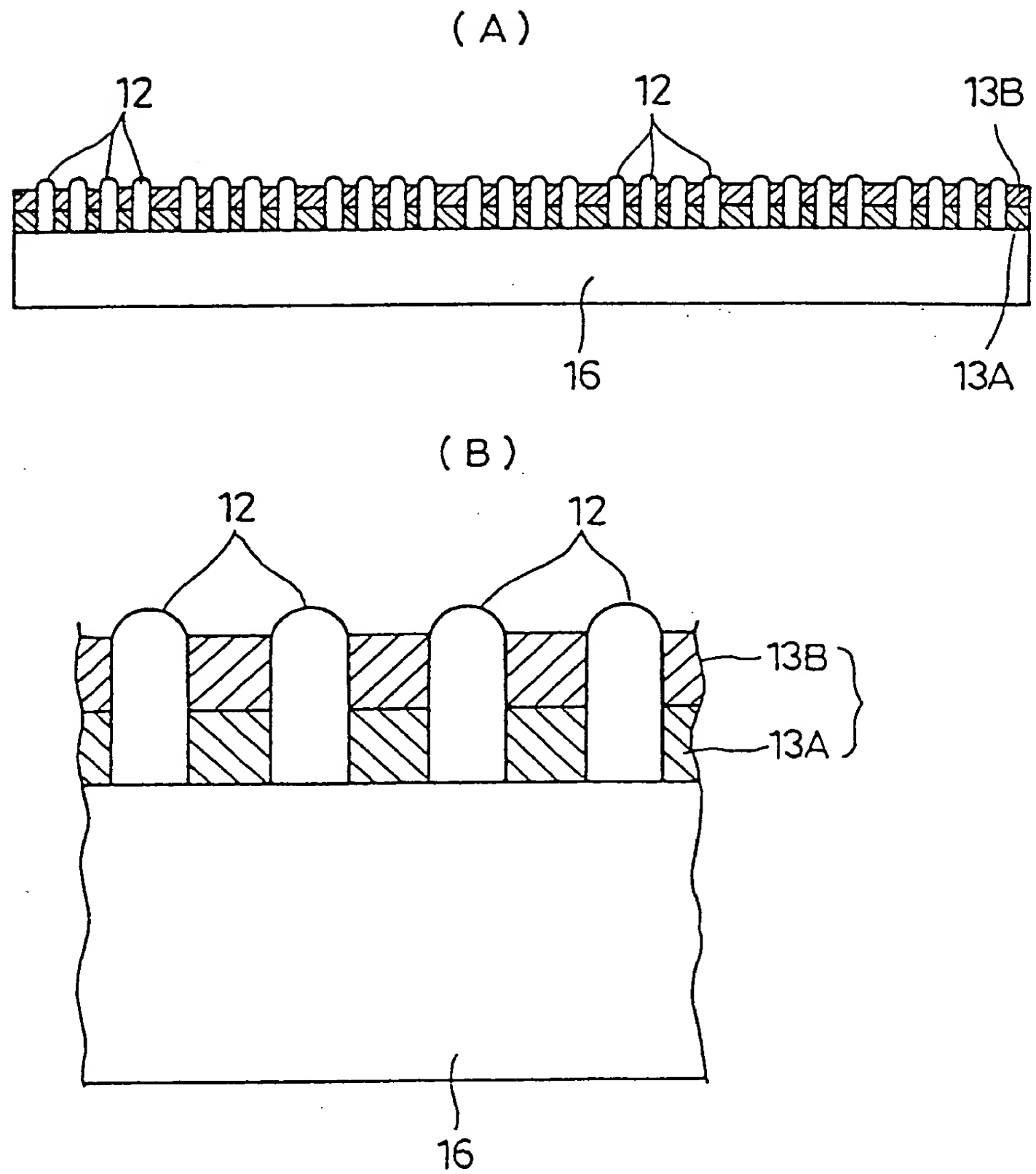
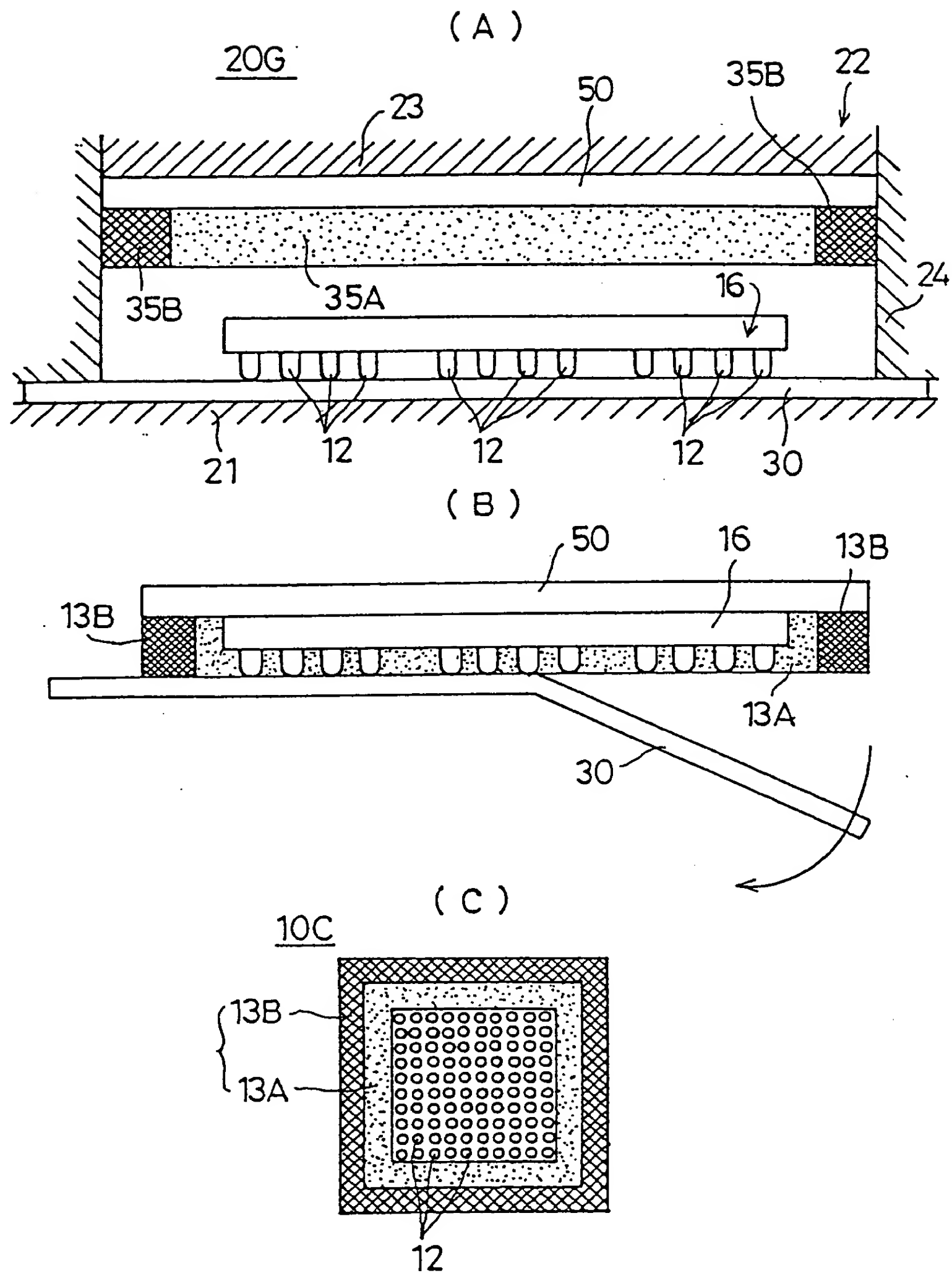
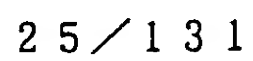


Fig. 29







**Fig. 31**



20G

( B )

10E

50A

Fig. 32

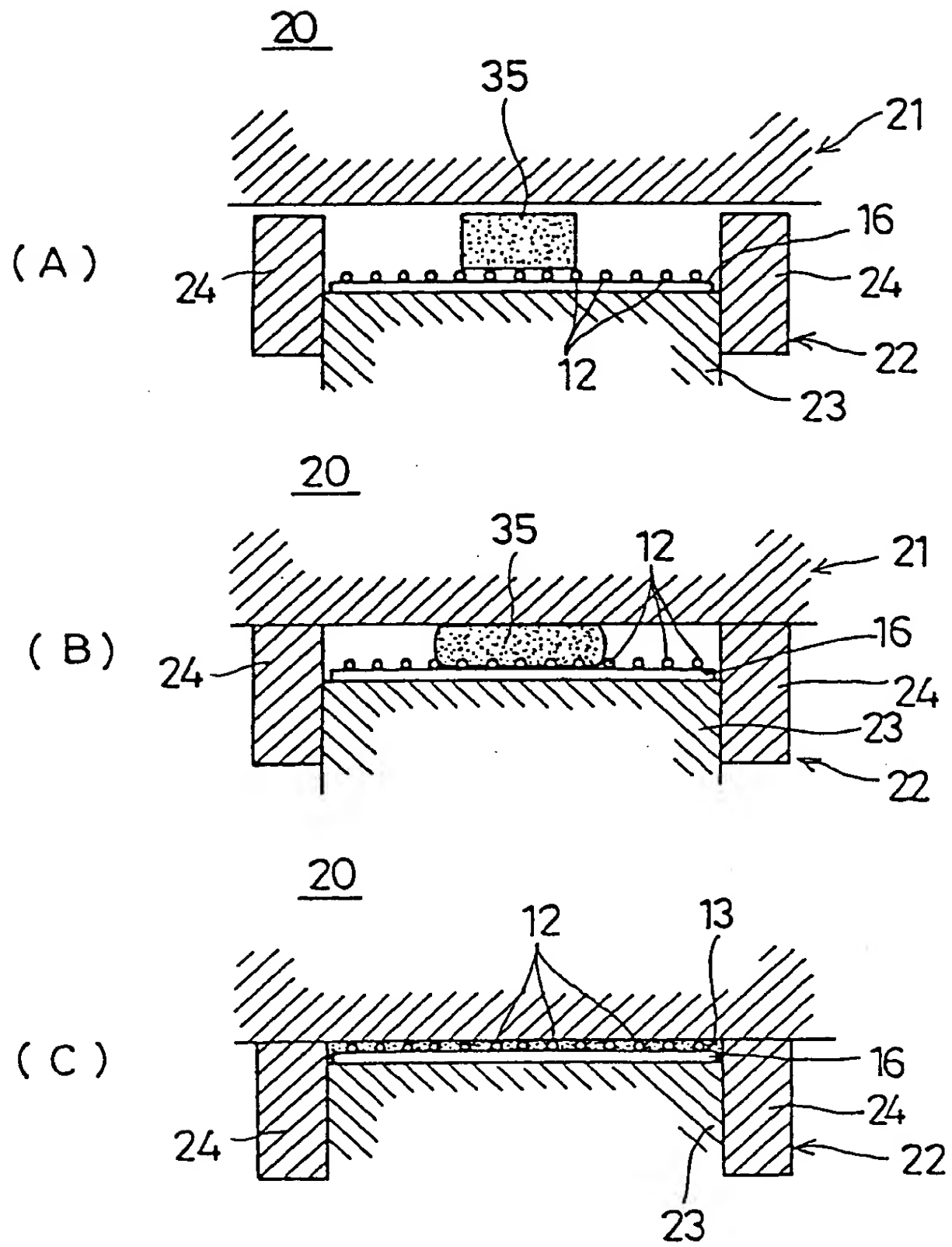


Fig. 33

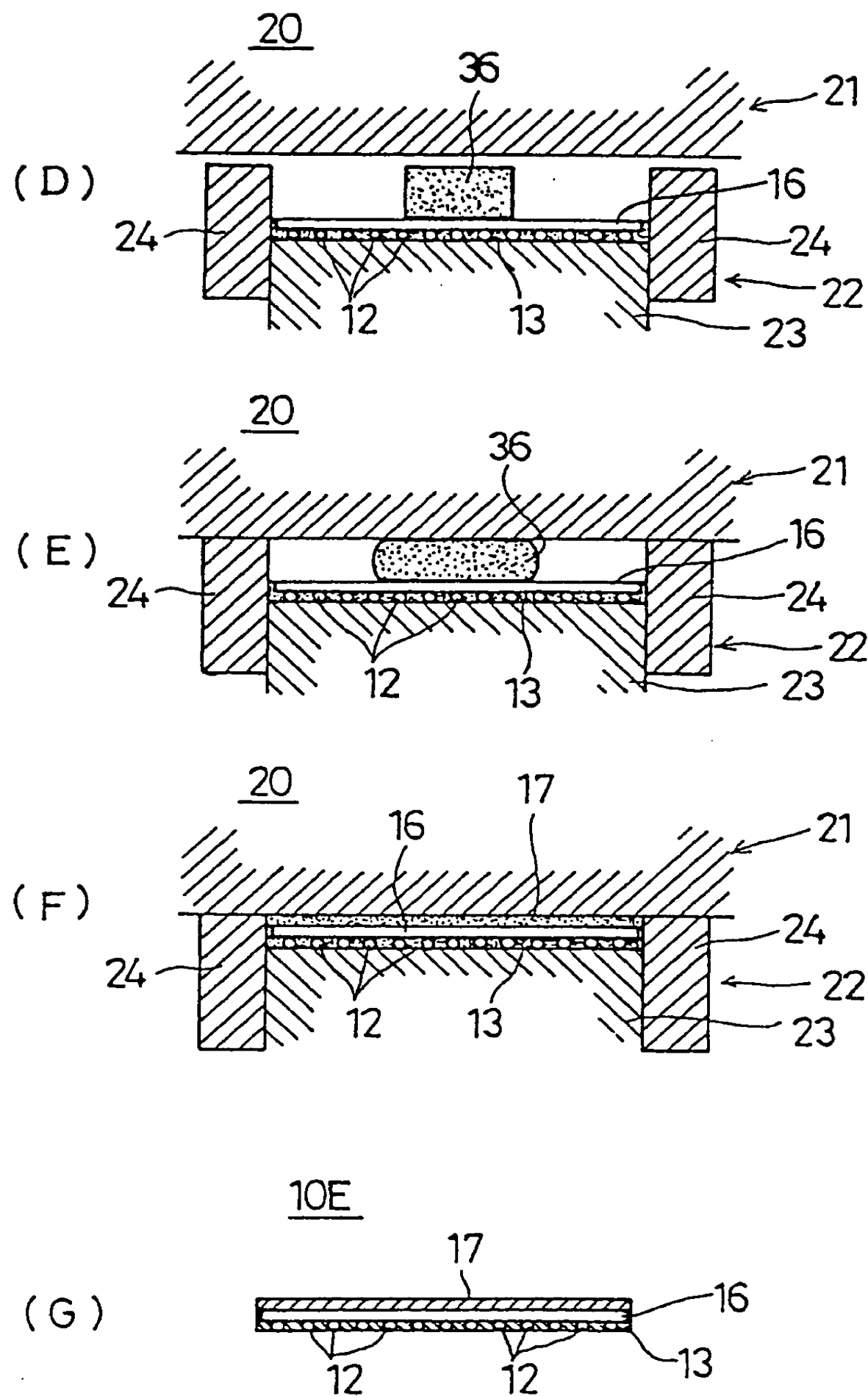


Fig. 34

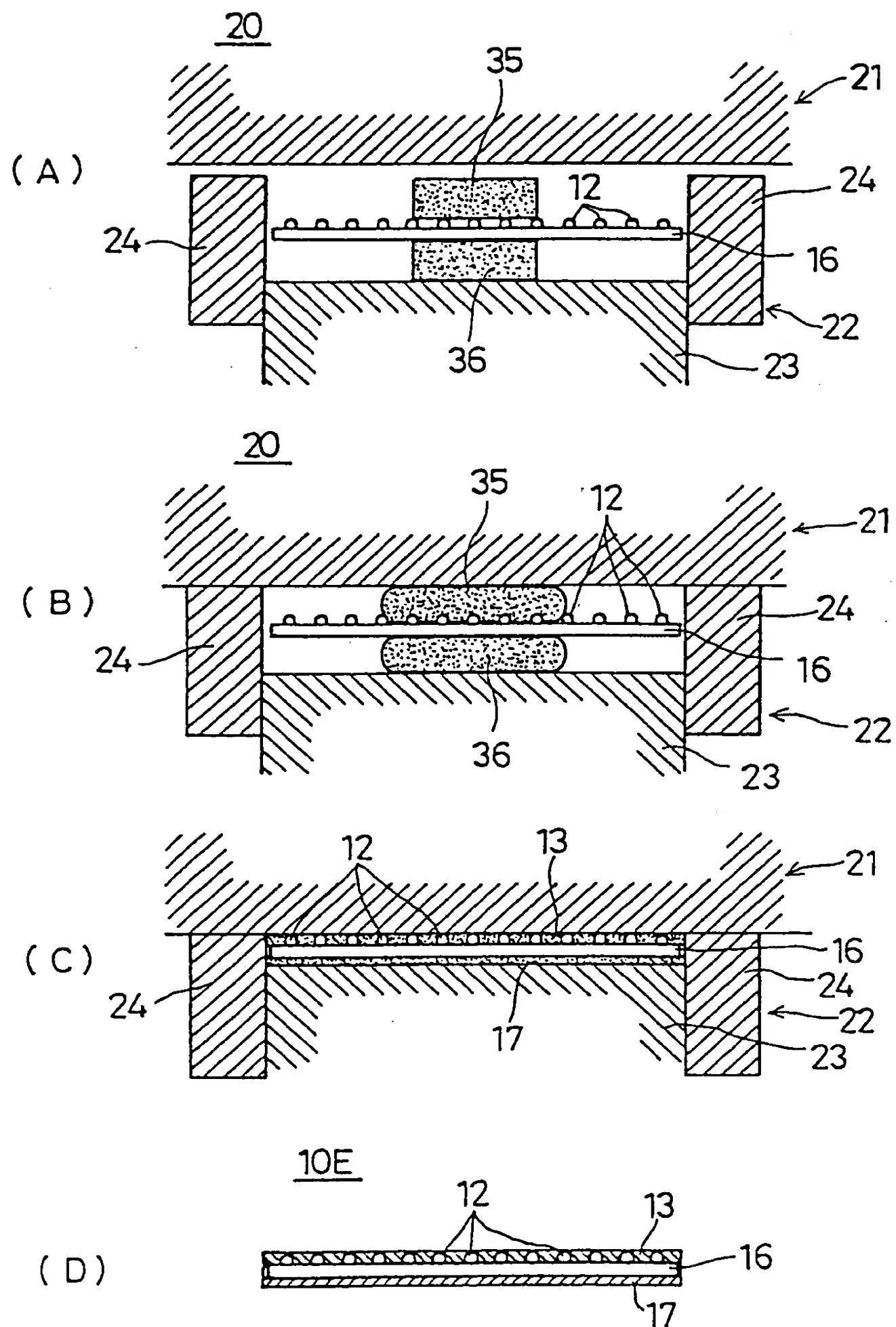


Fig. 35

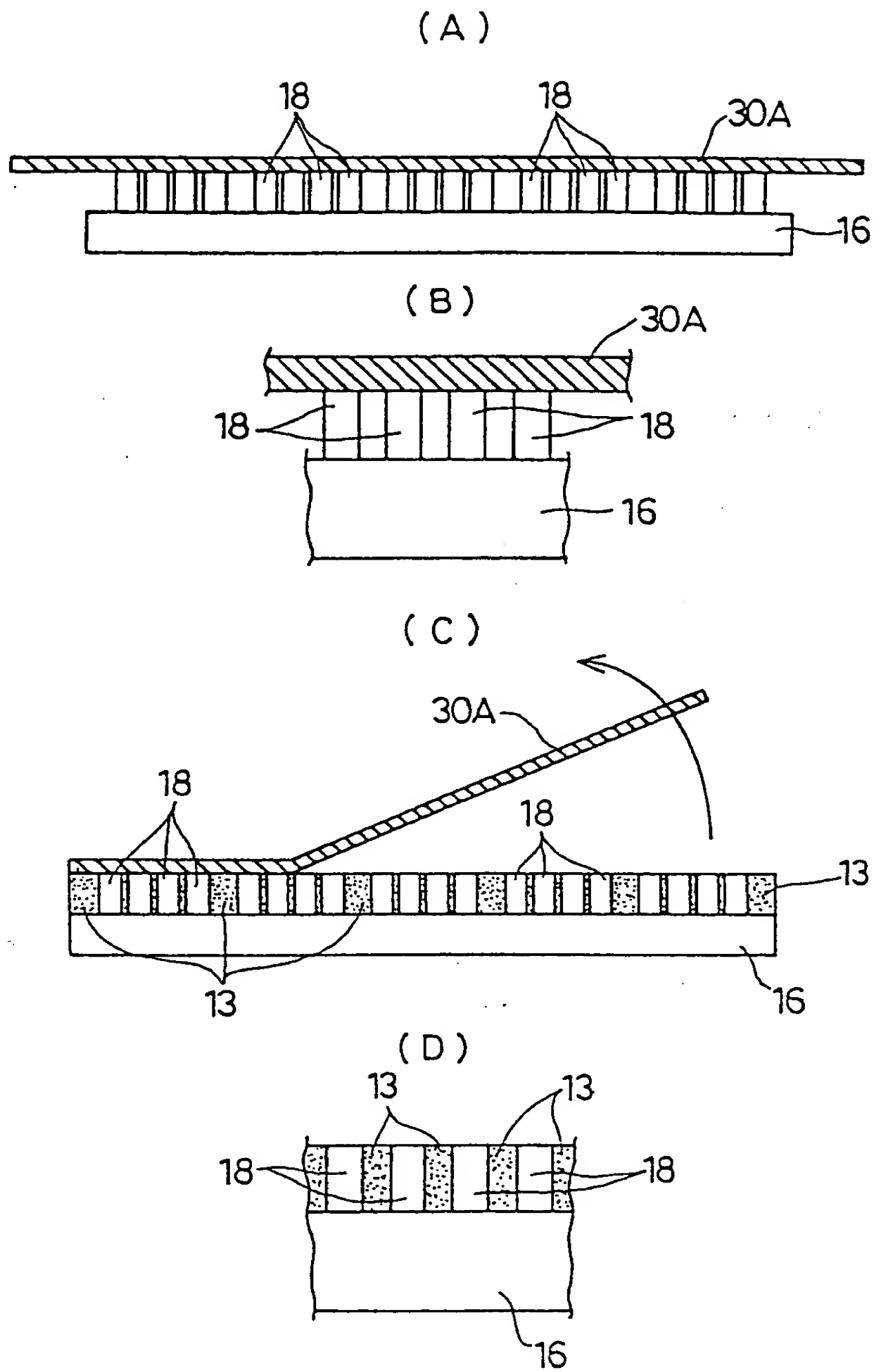
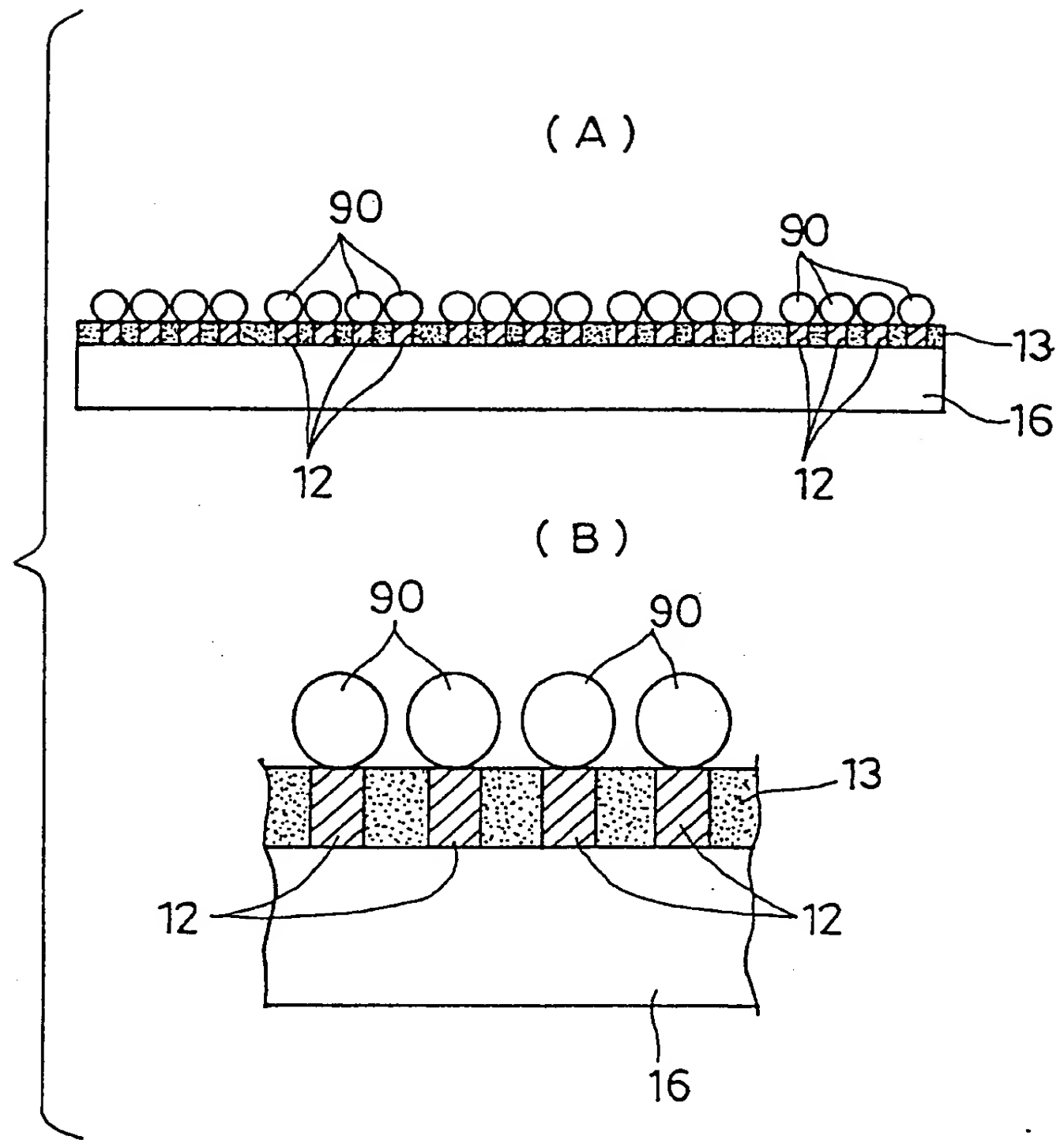


Fig. 36



09766655-061901

Fig. 37

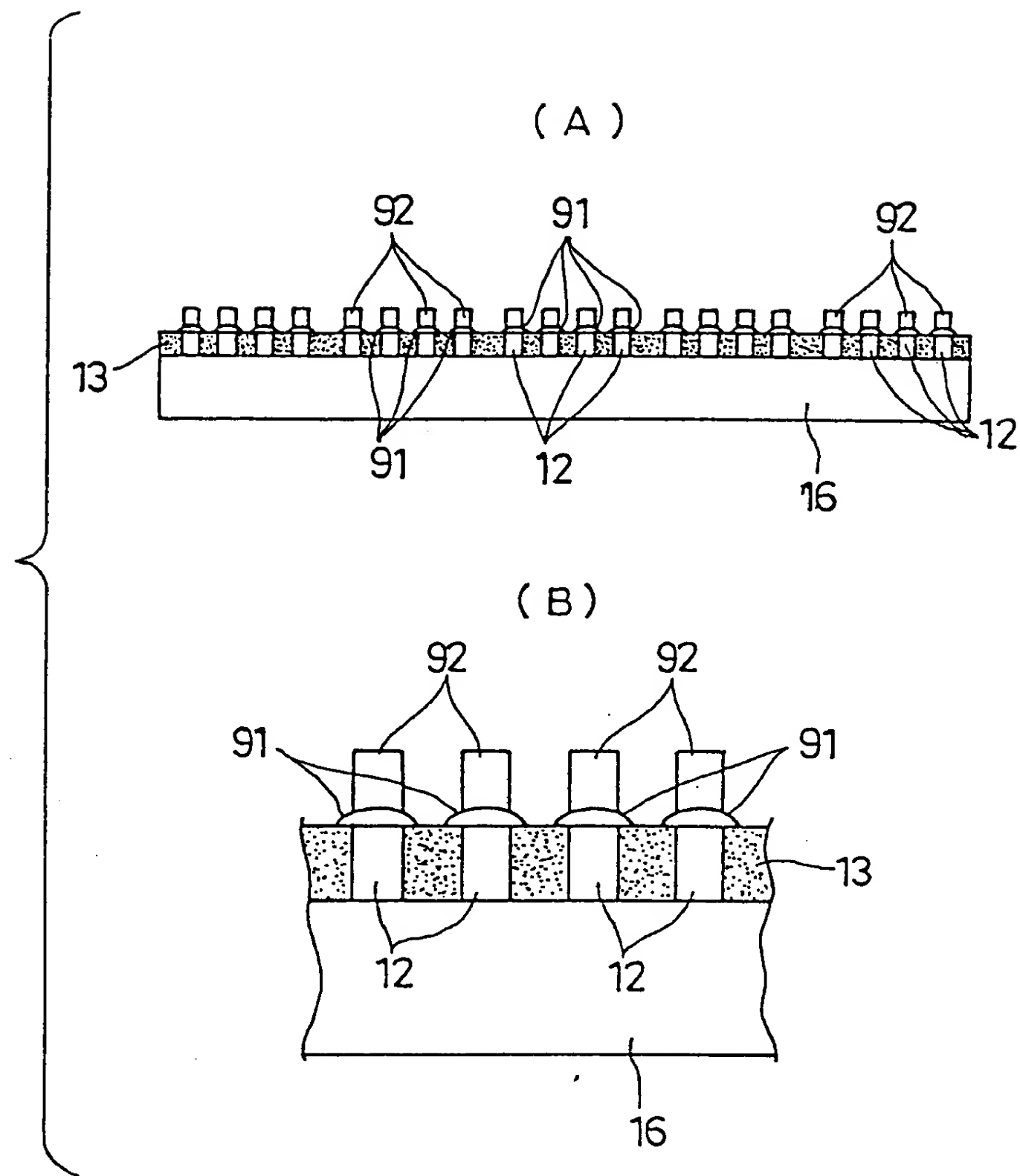
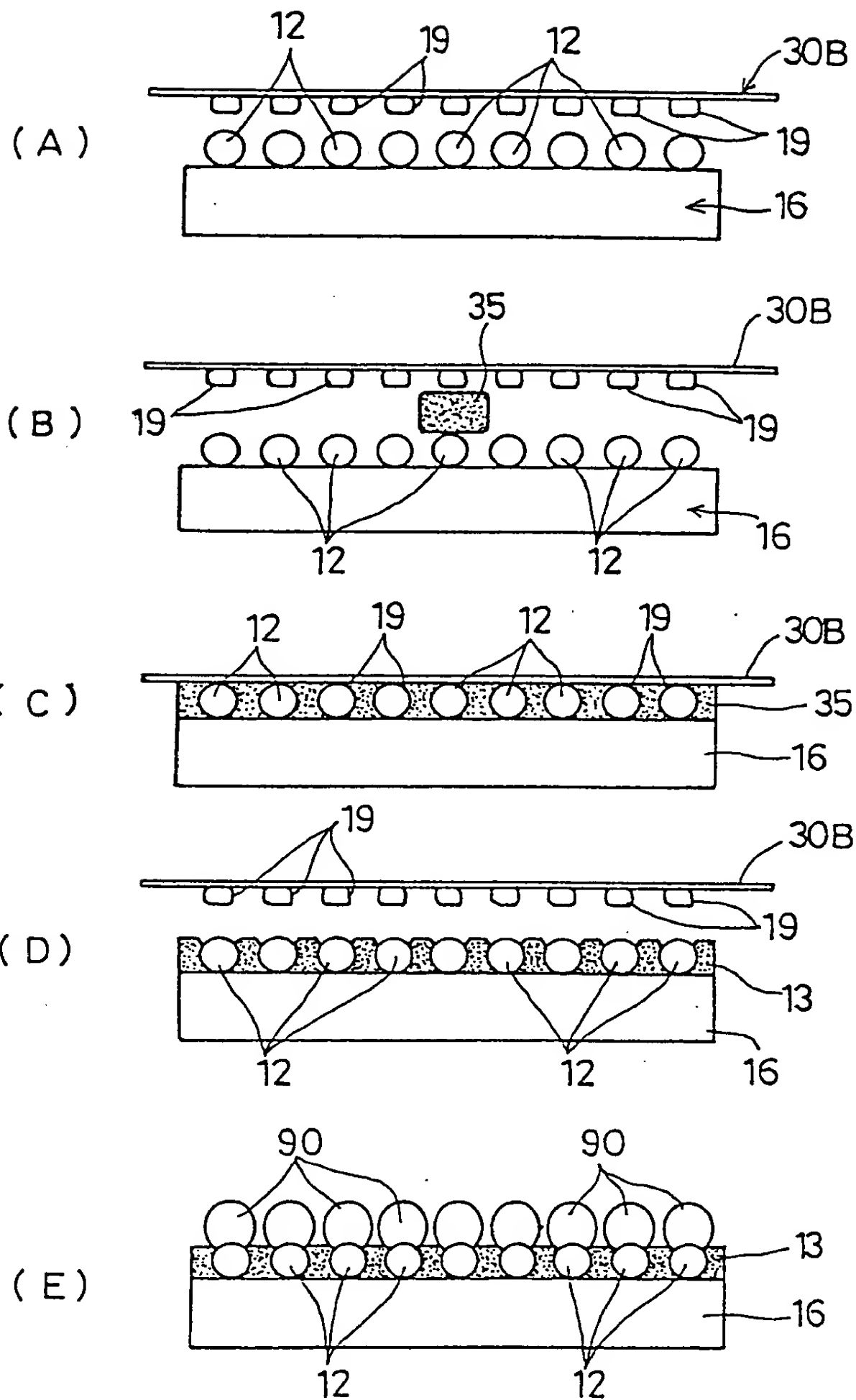


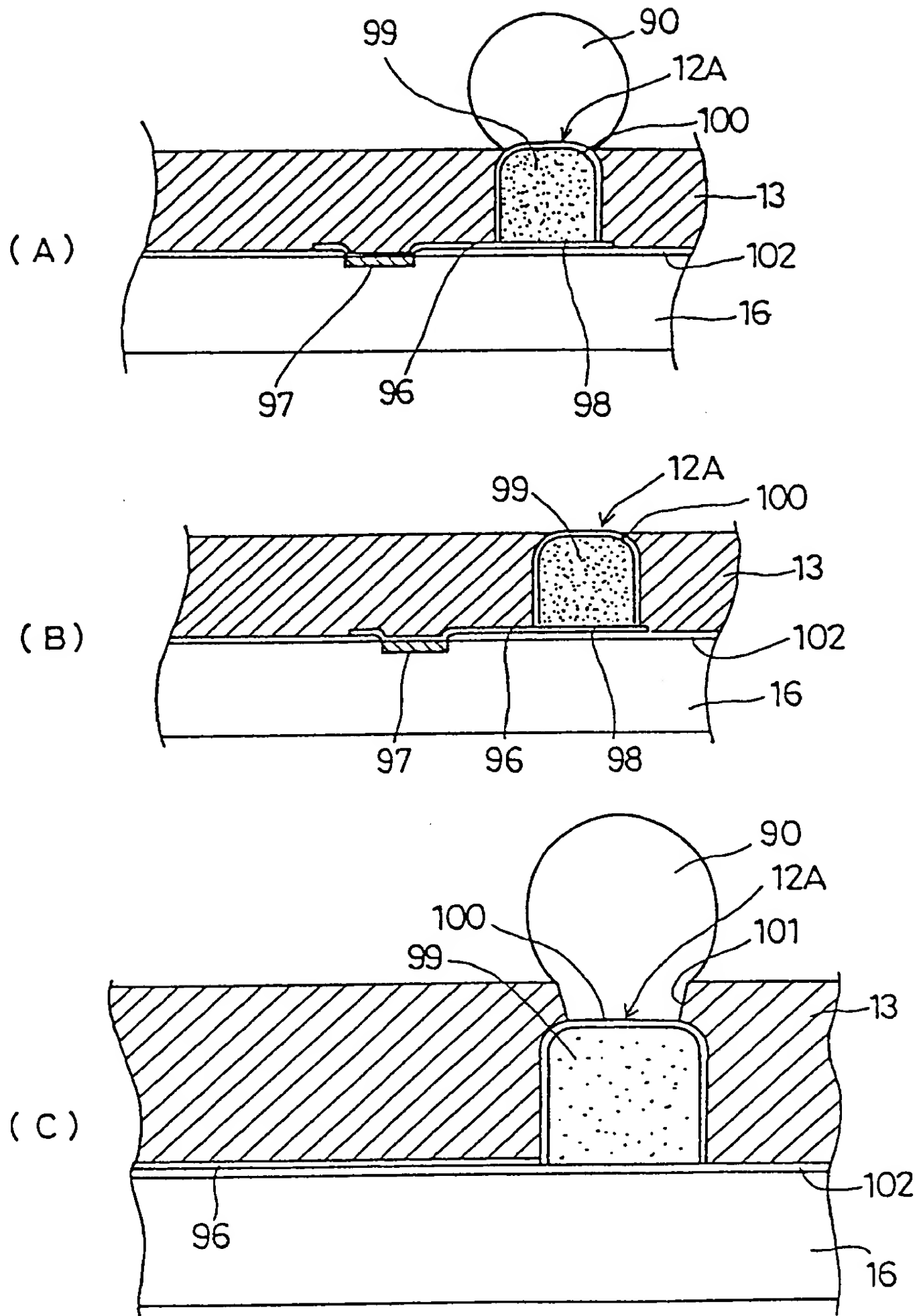


Fig. 38



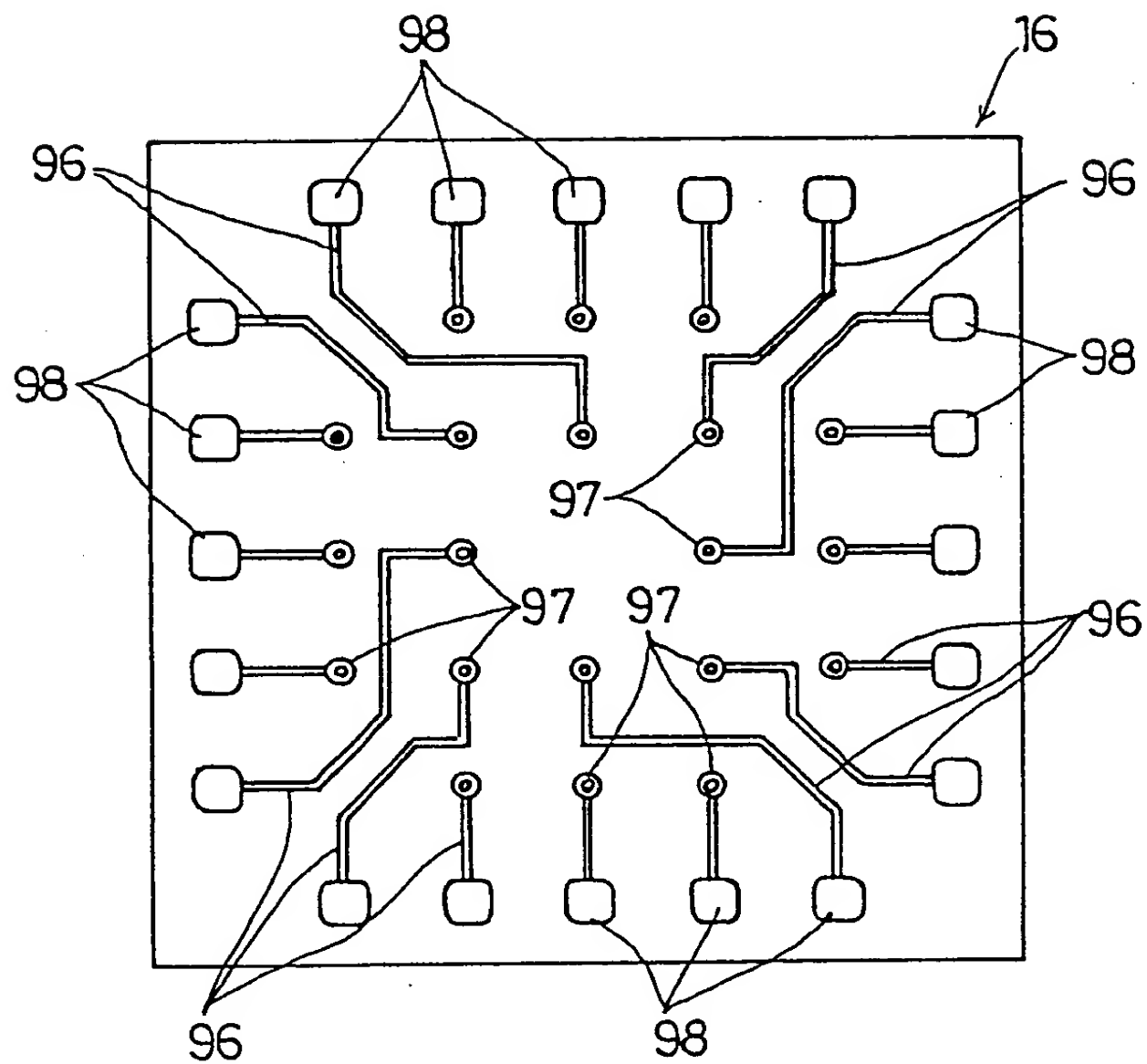
09766556-061901

Fig. 39



09766656-061901

Fig. 40



09766555-061901

Fig. 41

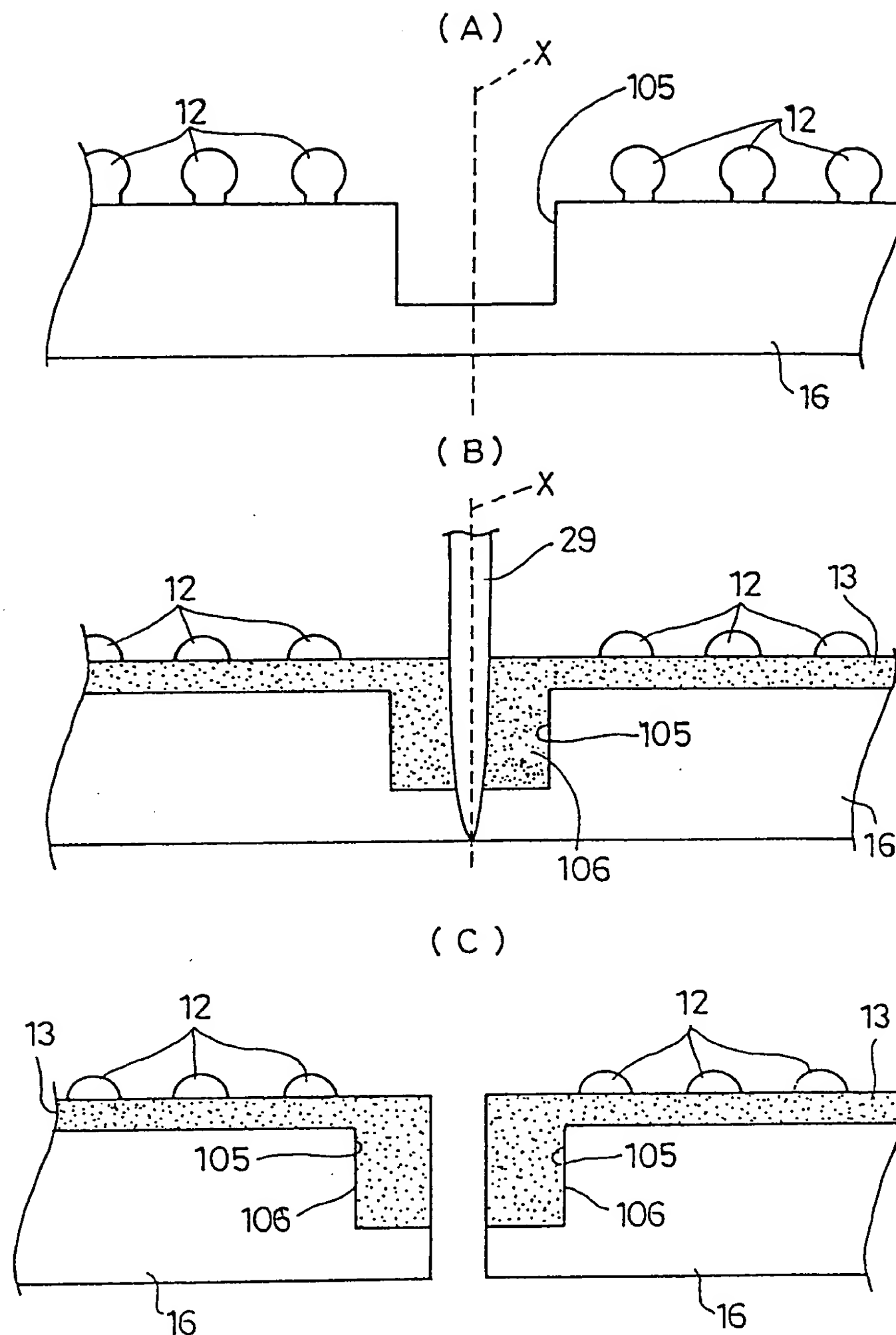


Fig. 42

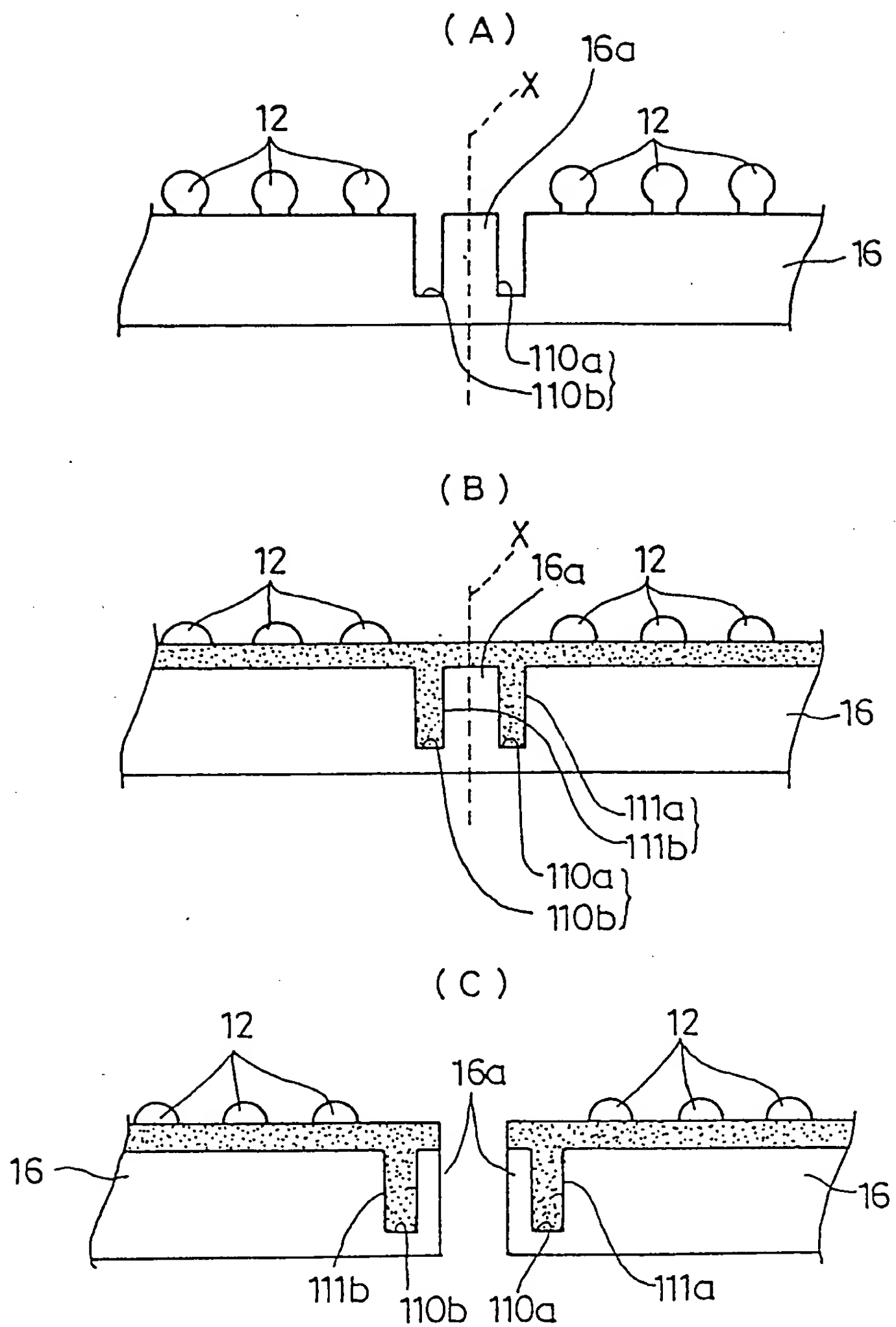


Fig. 43

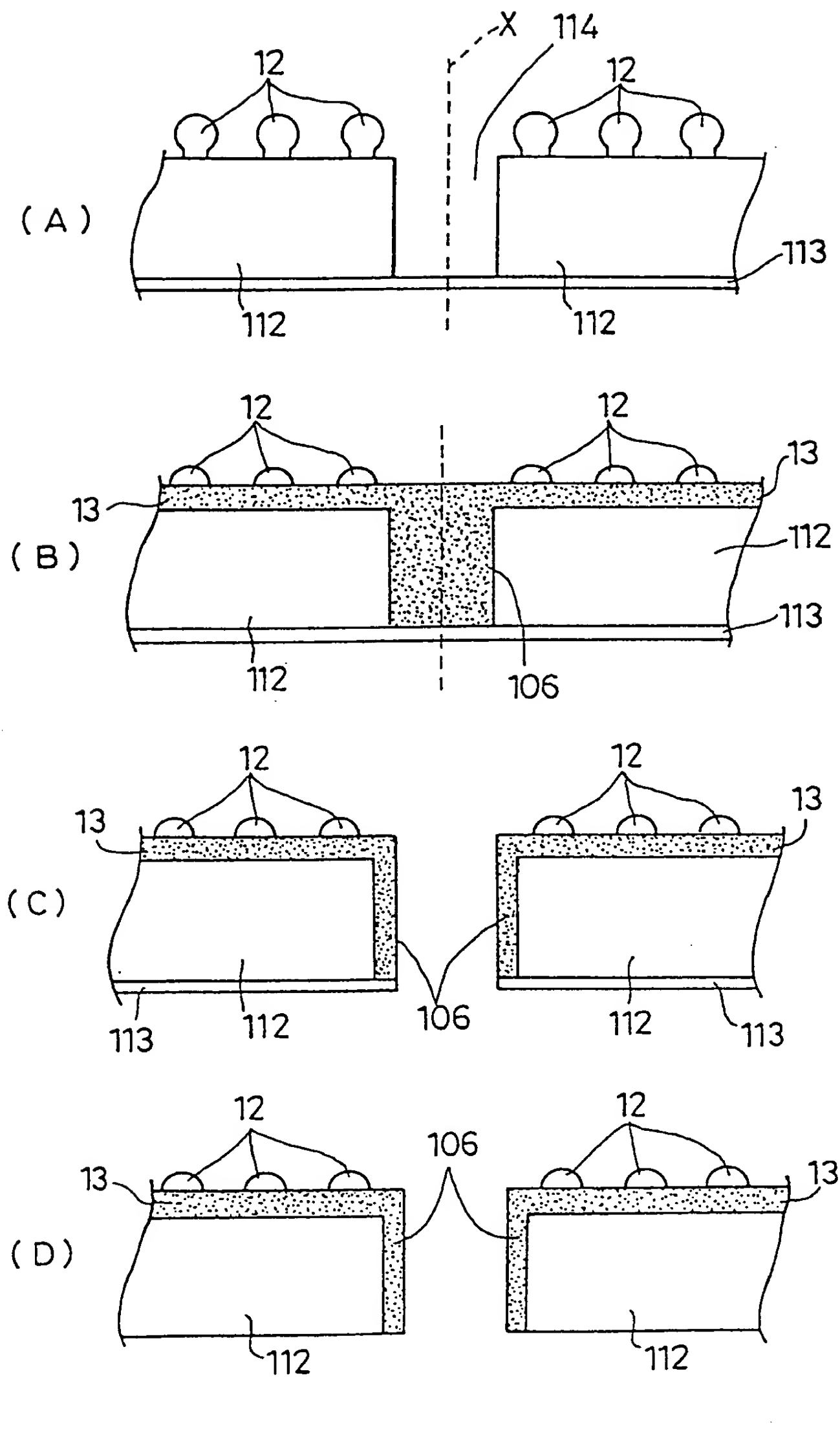


Fig. 44

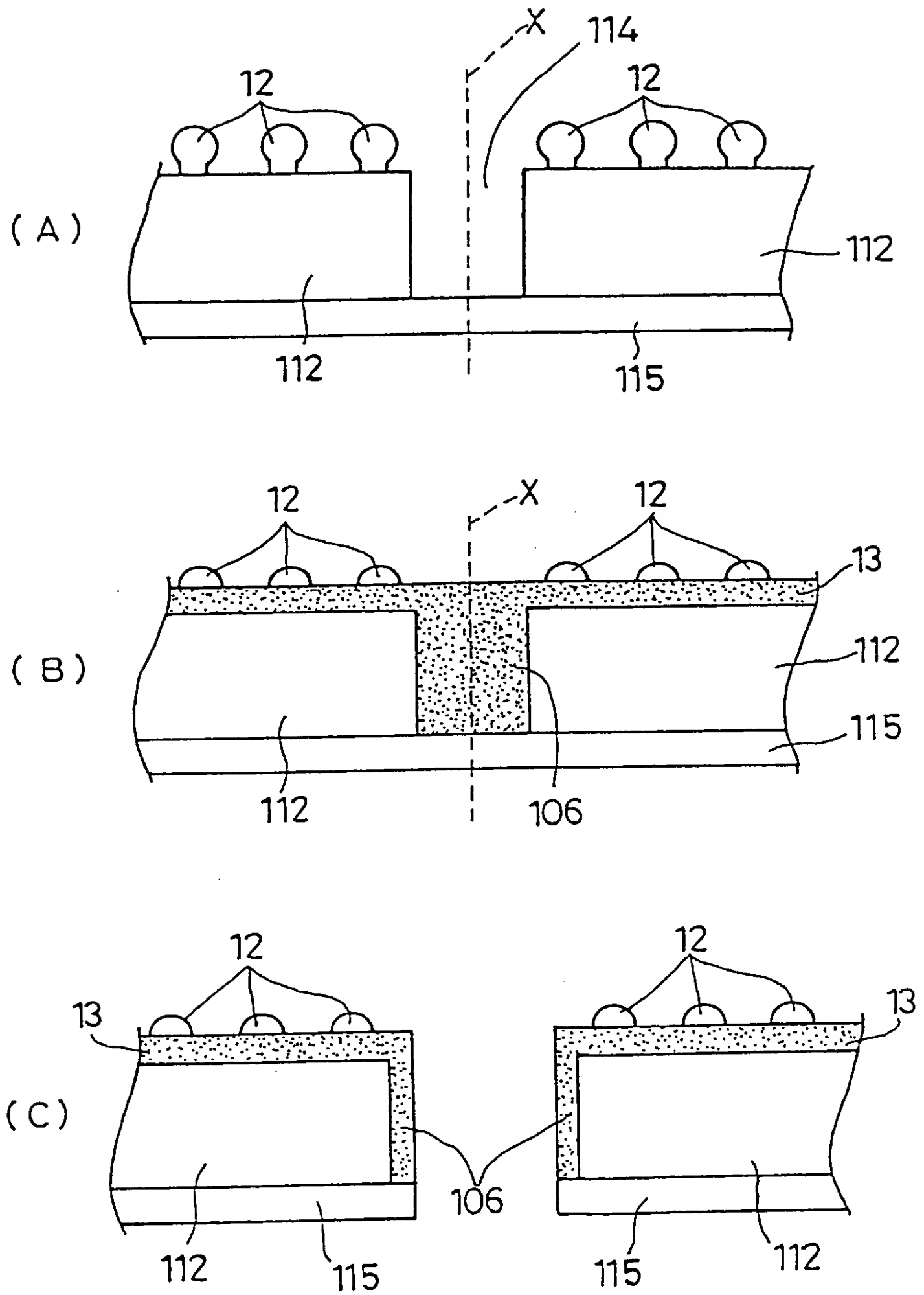


Fig. 45

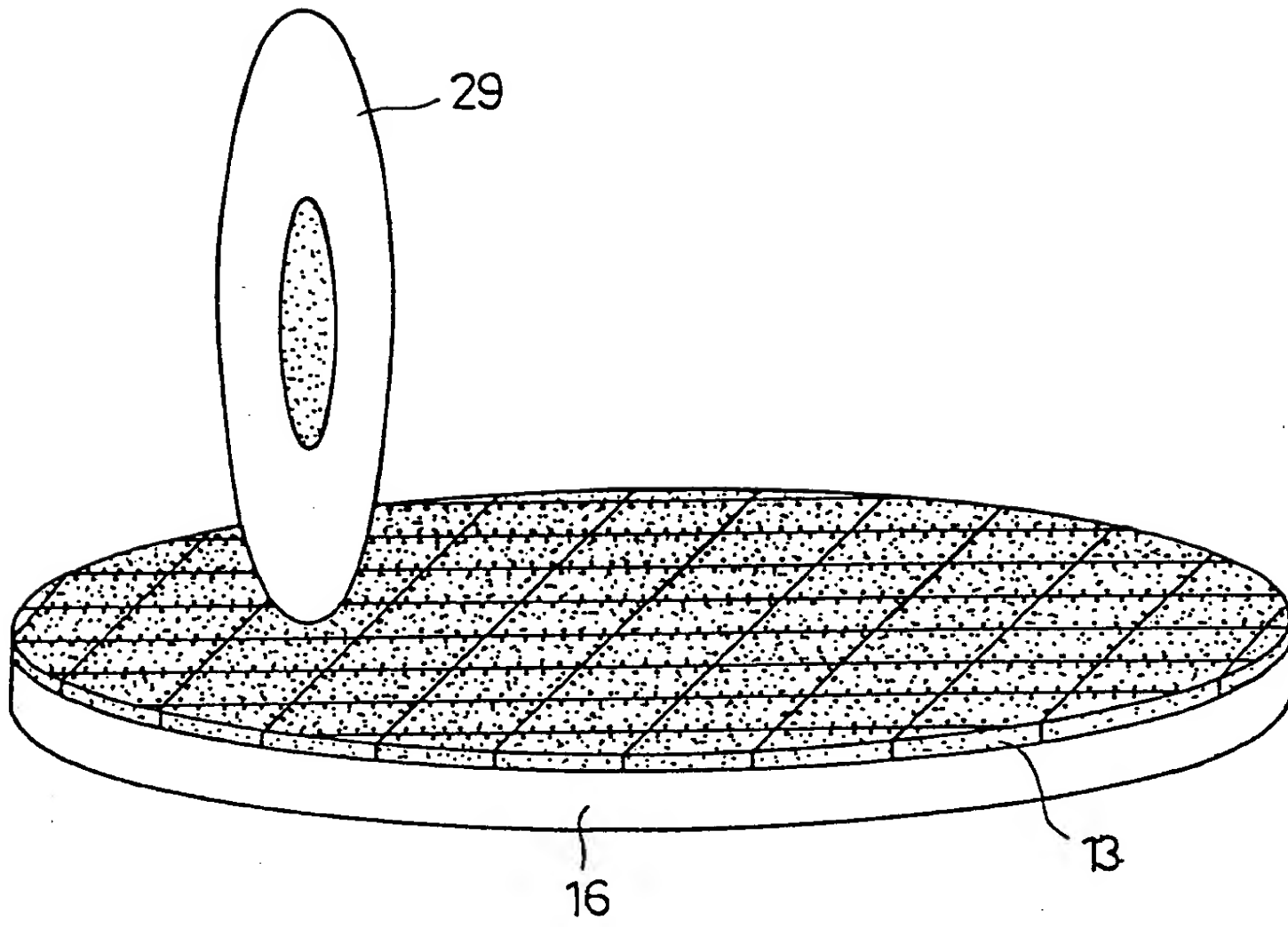
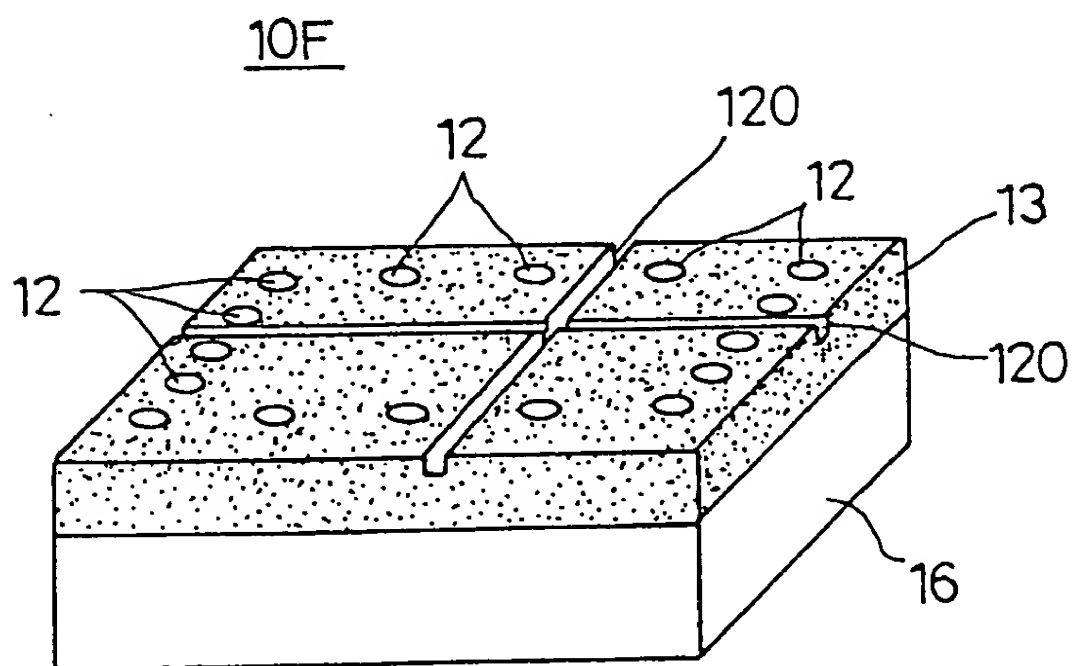


Fig. 46





0976656-061901  
FOR 999999/60

Fig. 47

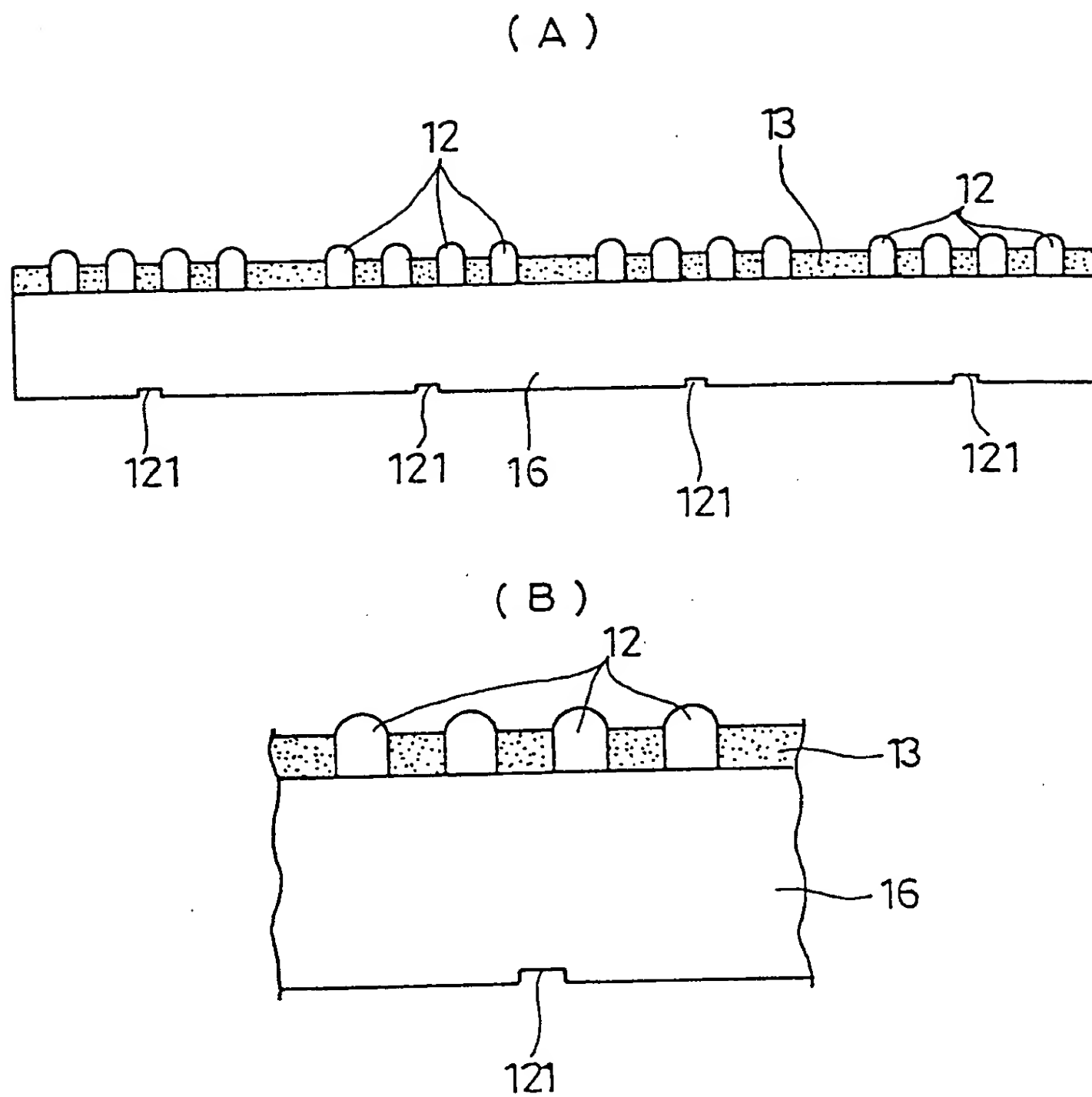
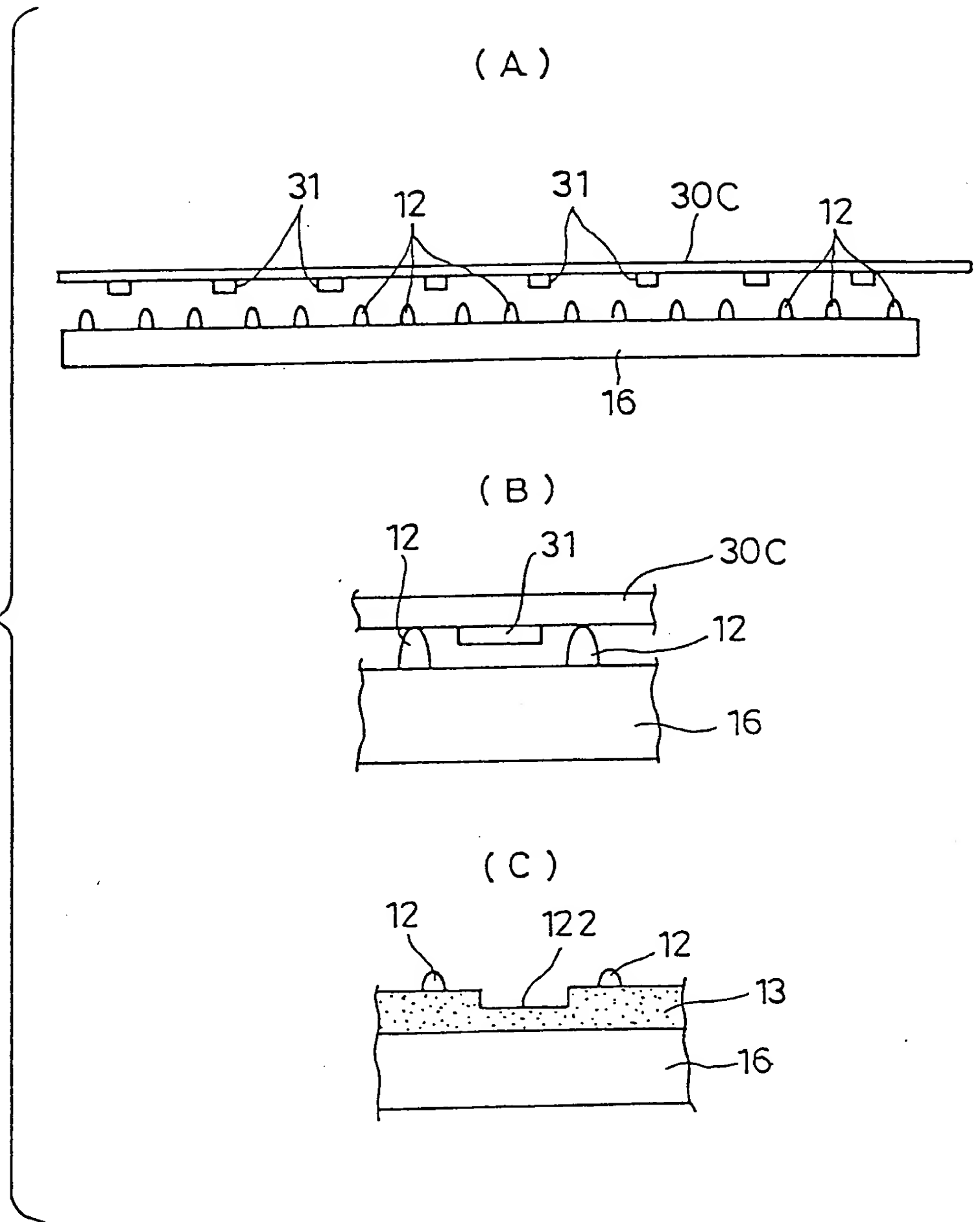


Fig. 48



0976656-061901  
FIG. 49

Fig. 49

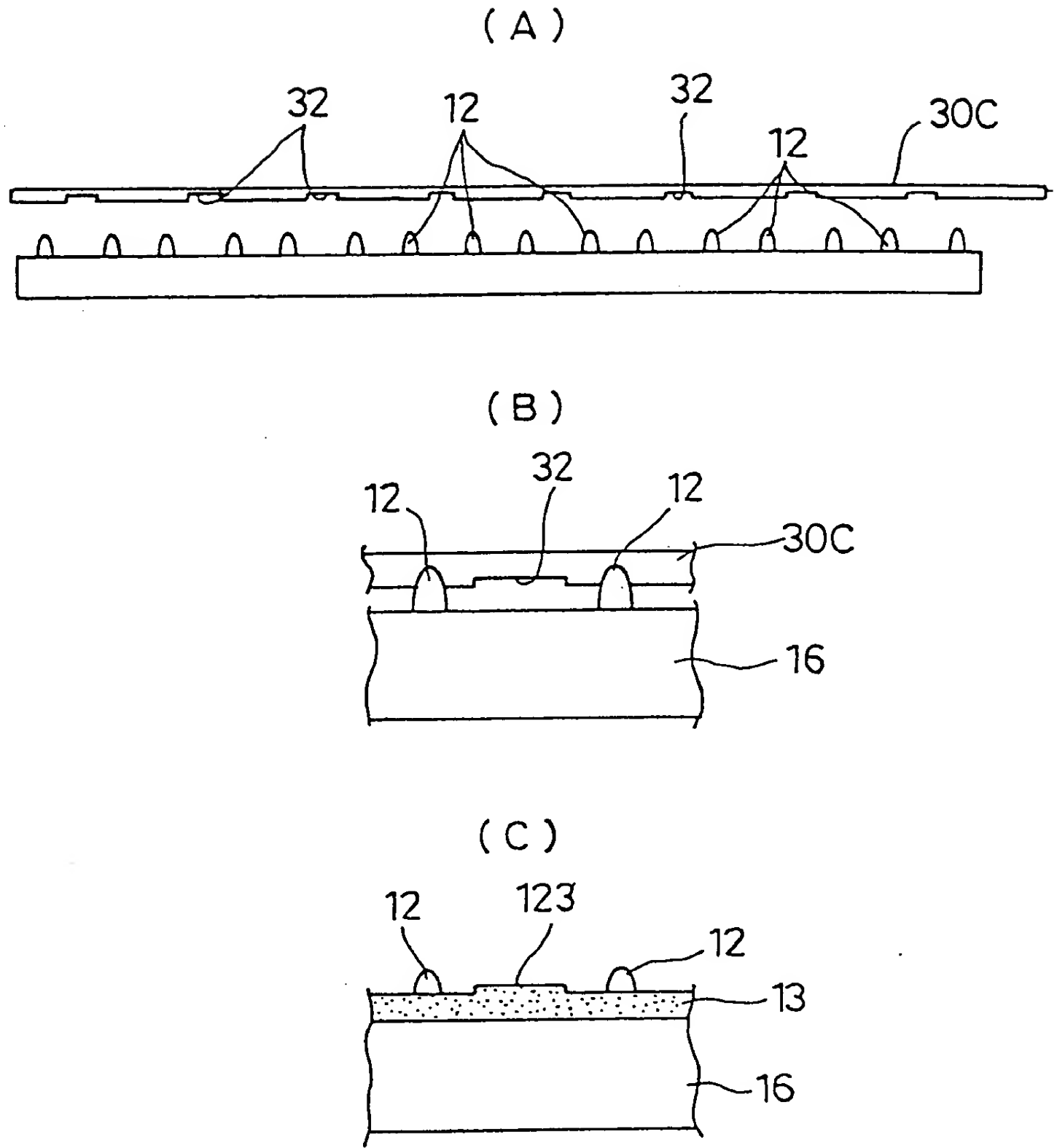
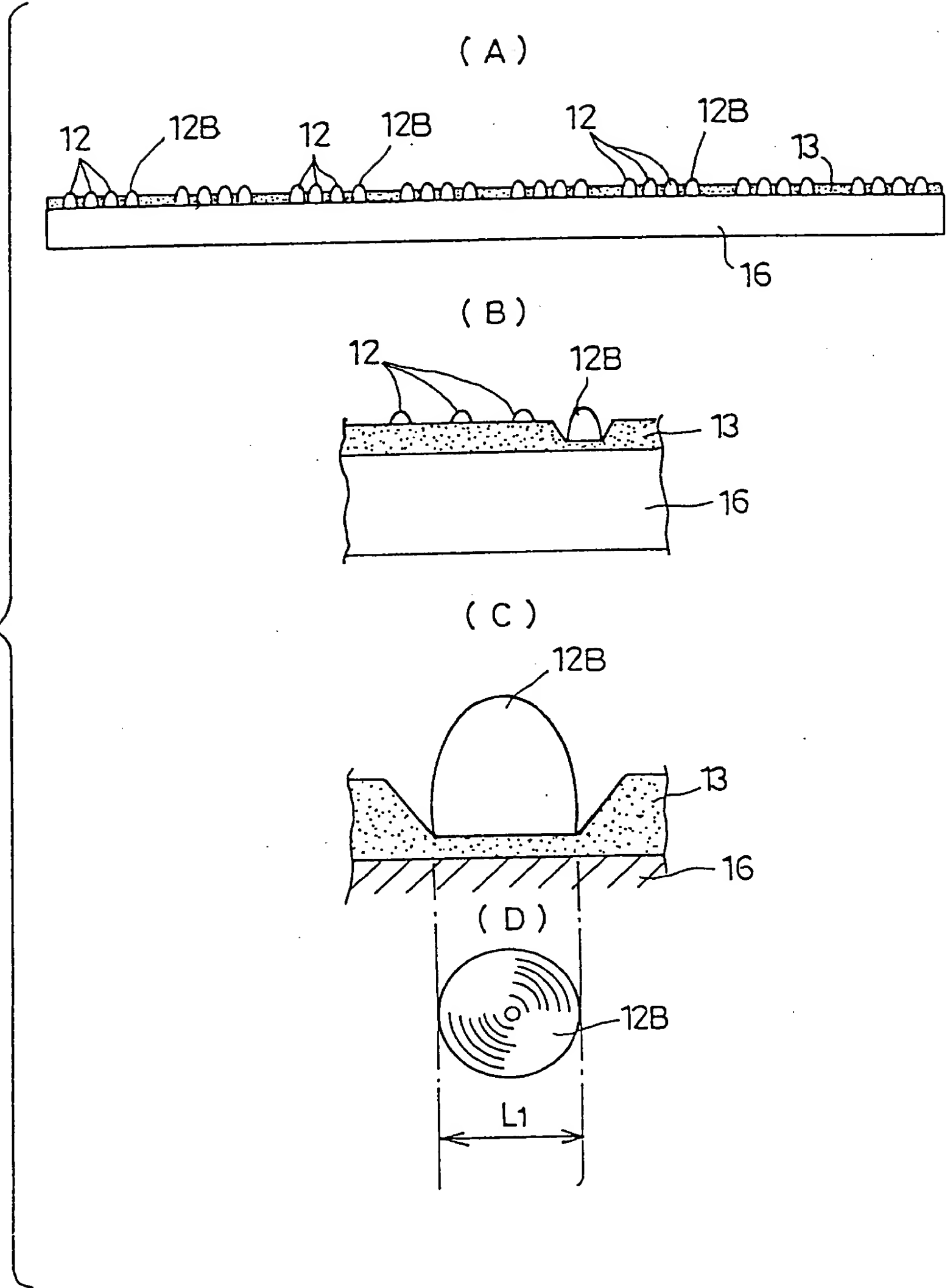
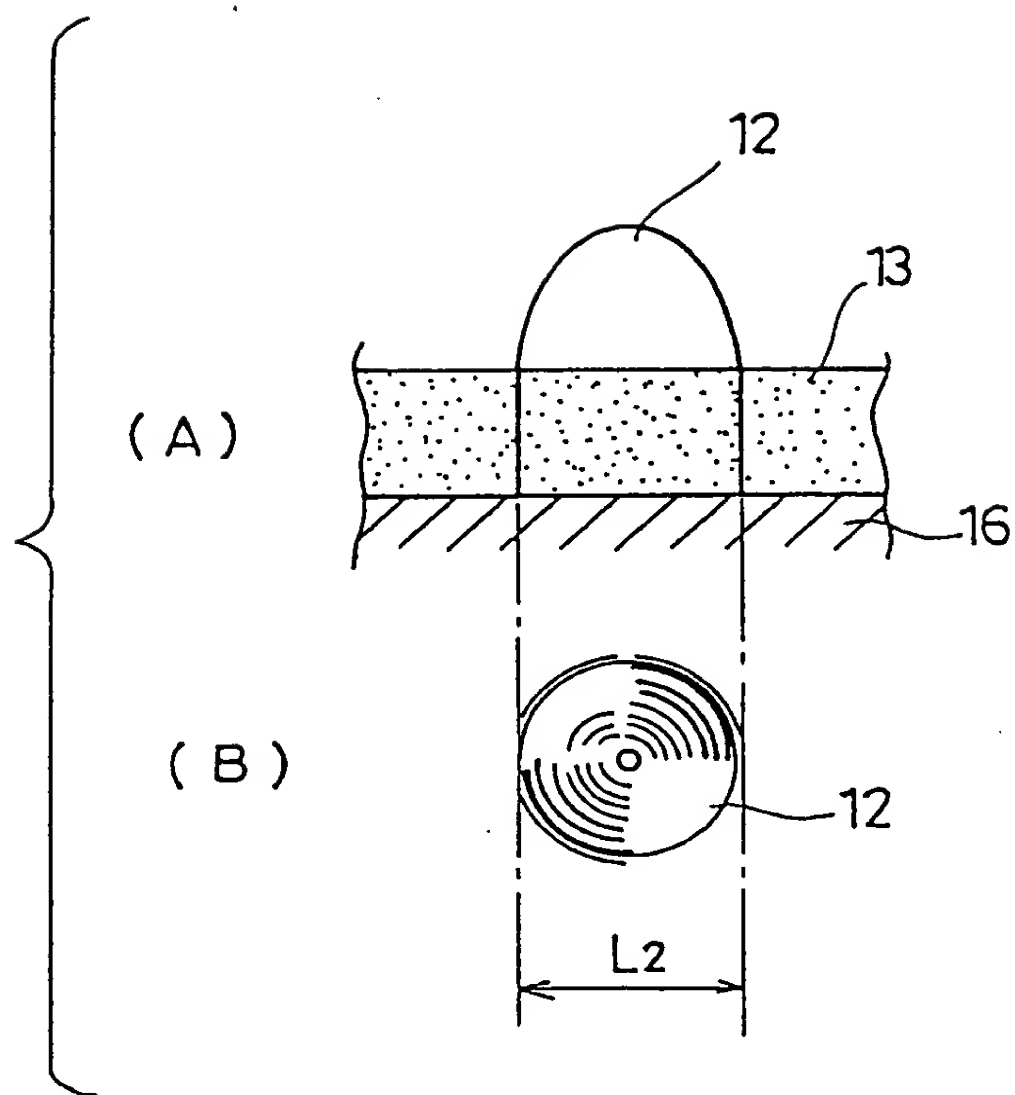


Fig. 50



09766656-061901

Fig. 51



096666-061901

Fig. 52

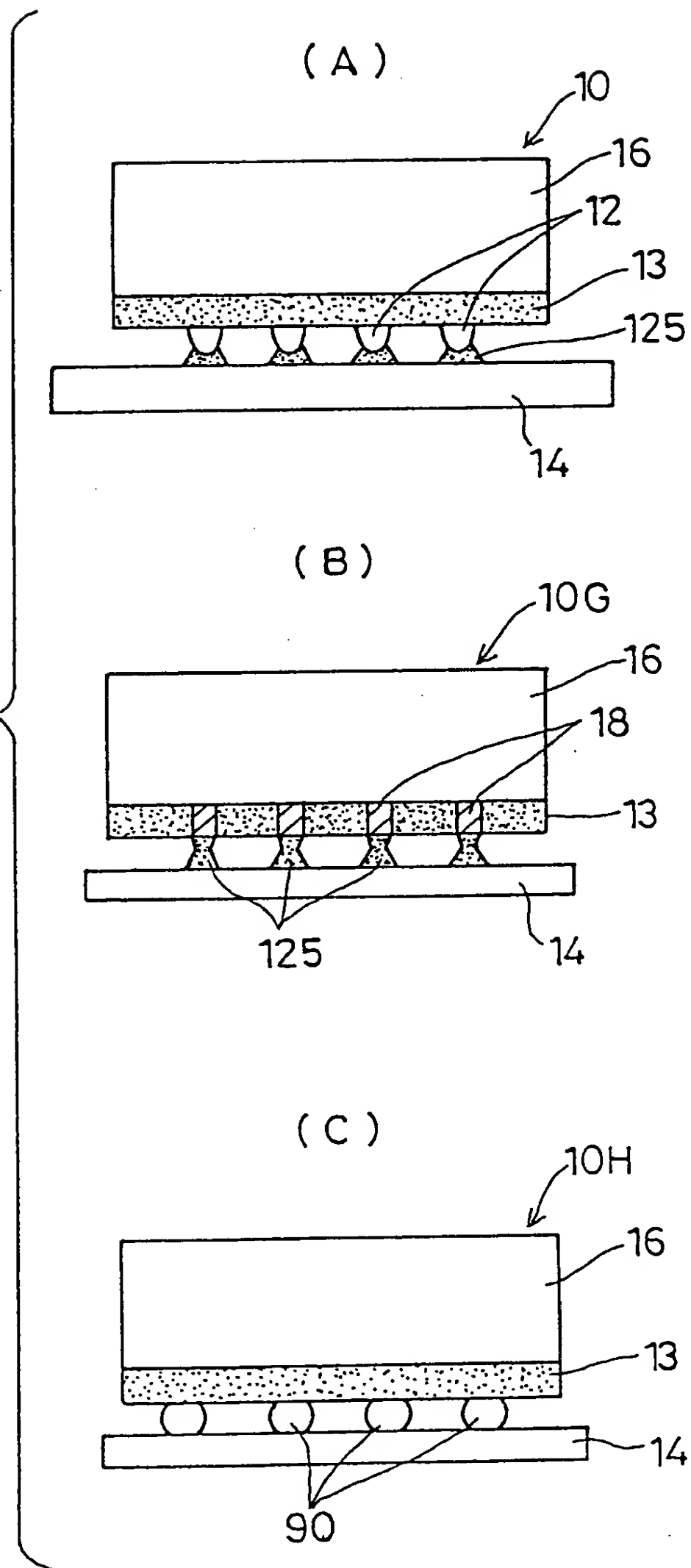


Fig. 53

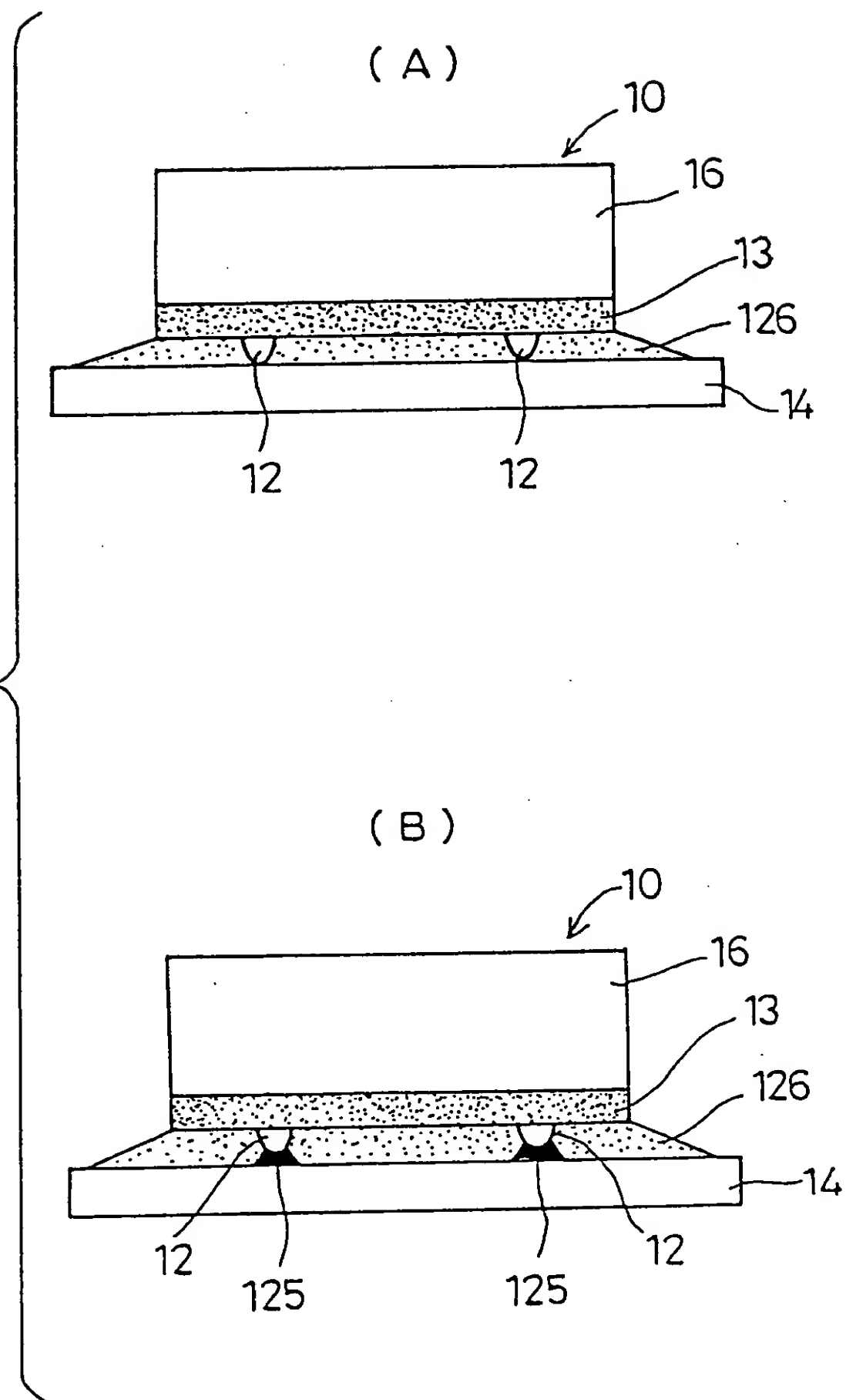
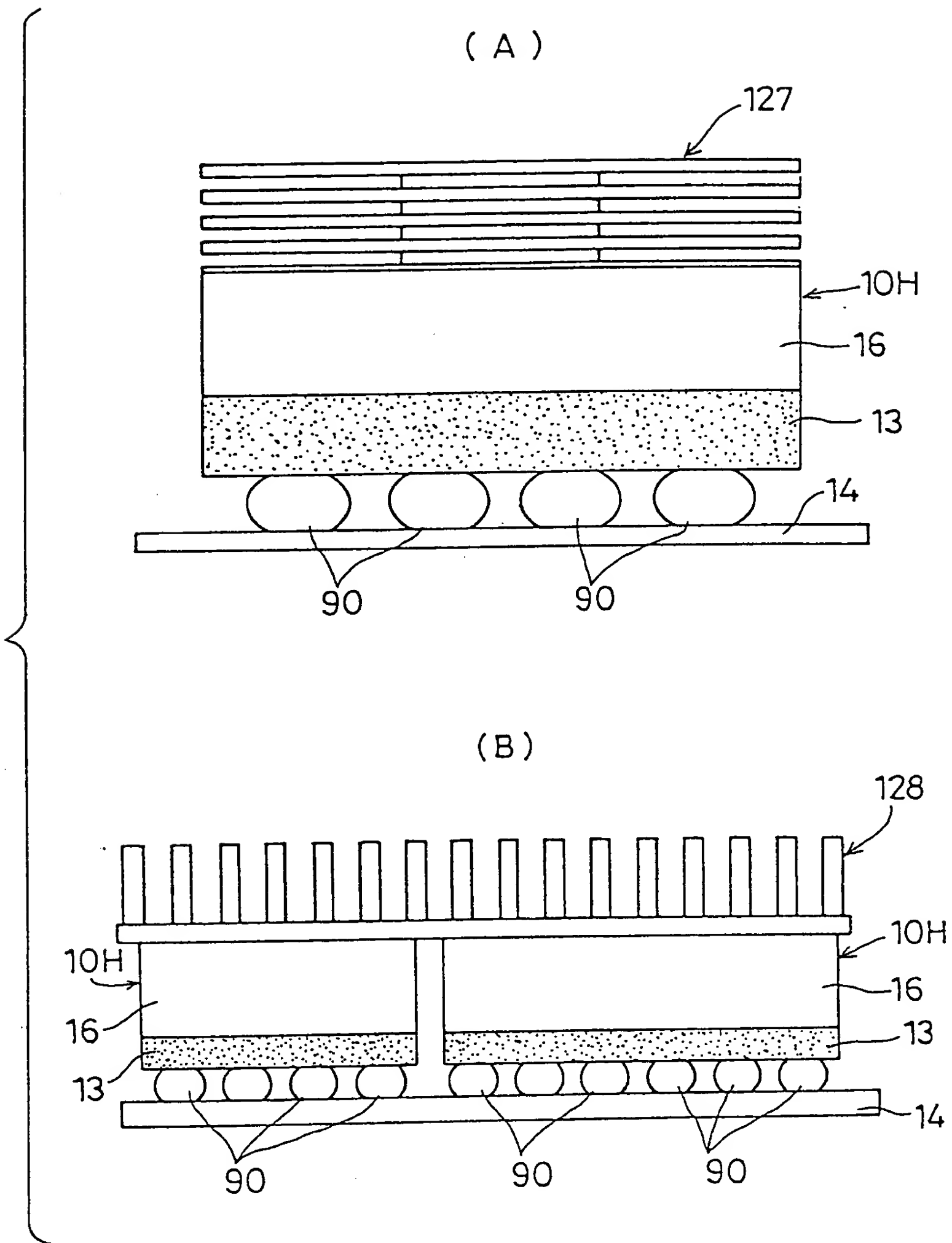


Fig. 54





0976666-061901

Fig. 55

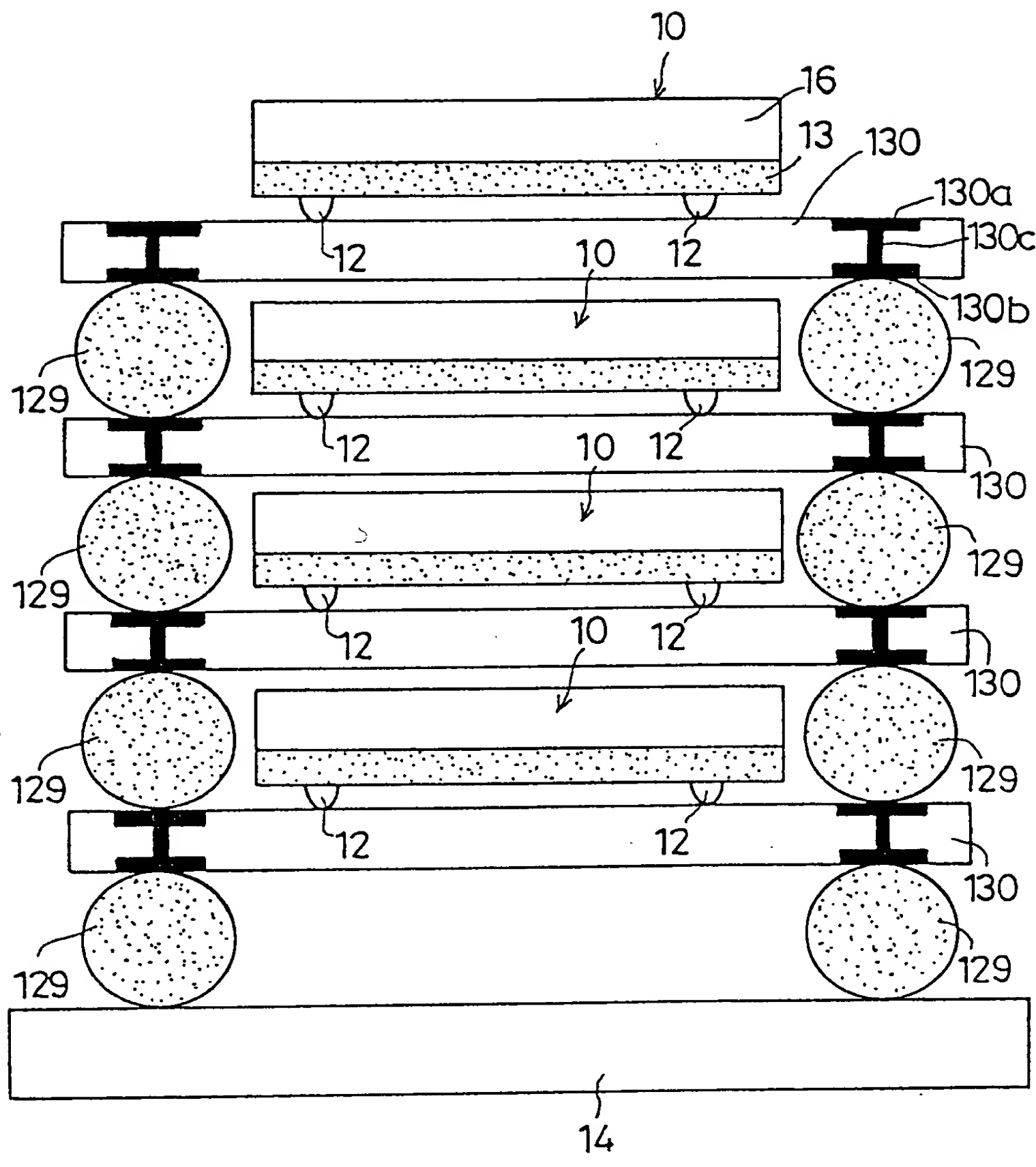


Fig. 56

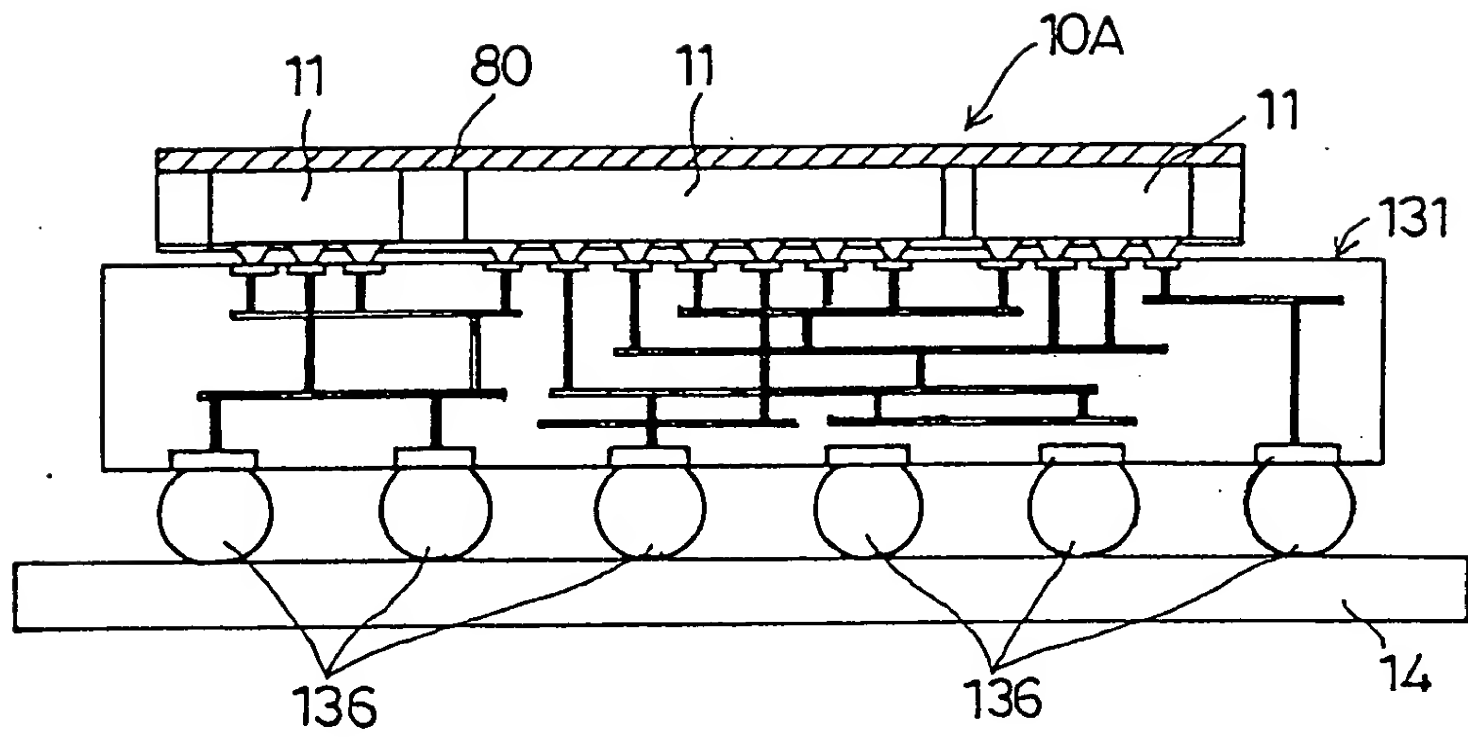
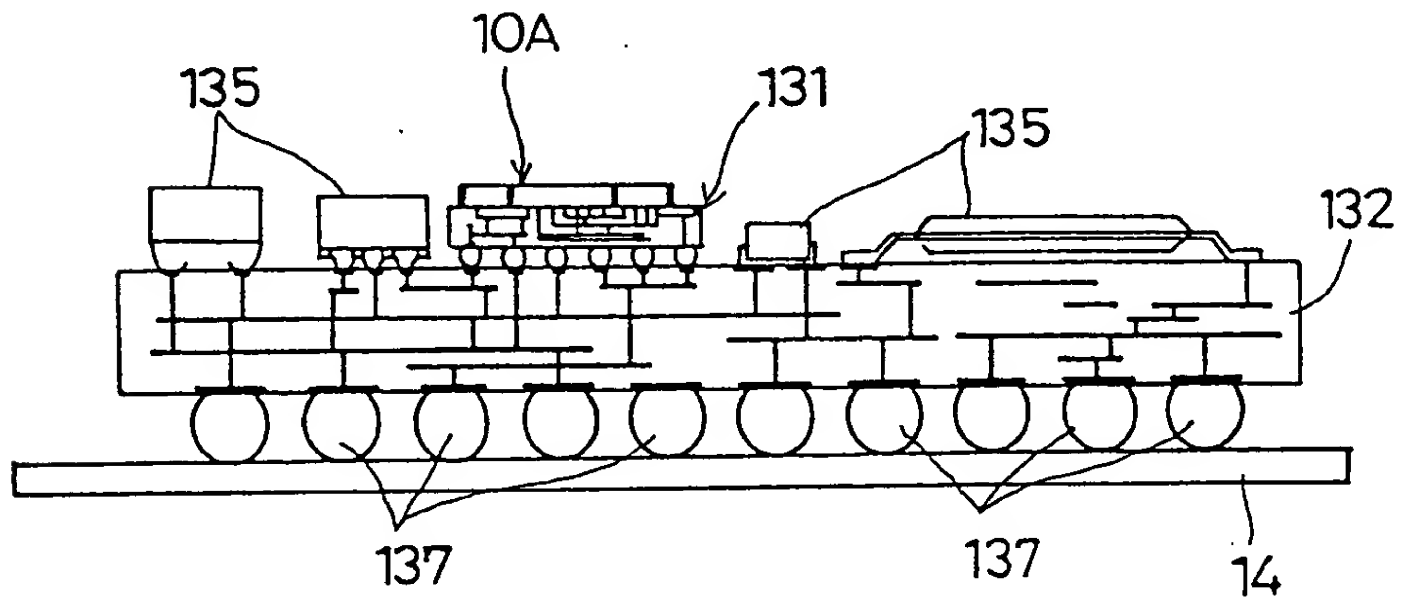


Fig. 57



0976555-051901  
TOP SECRET 9599260

Fig. 58

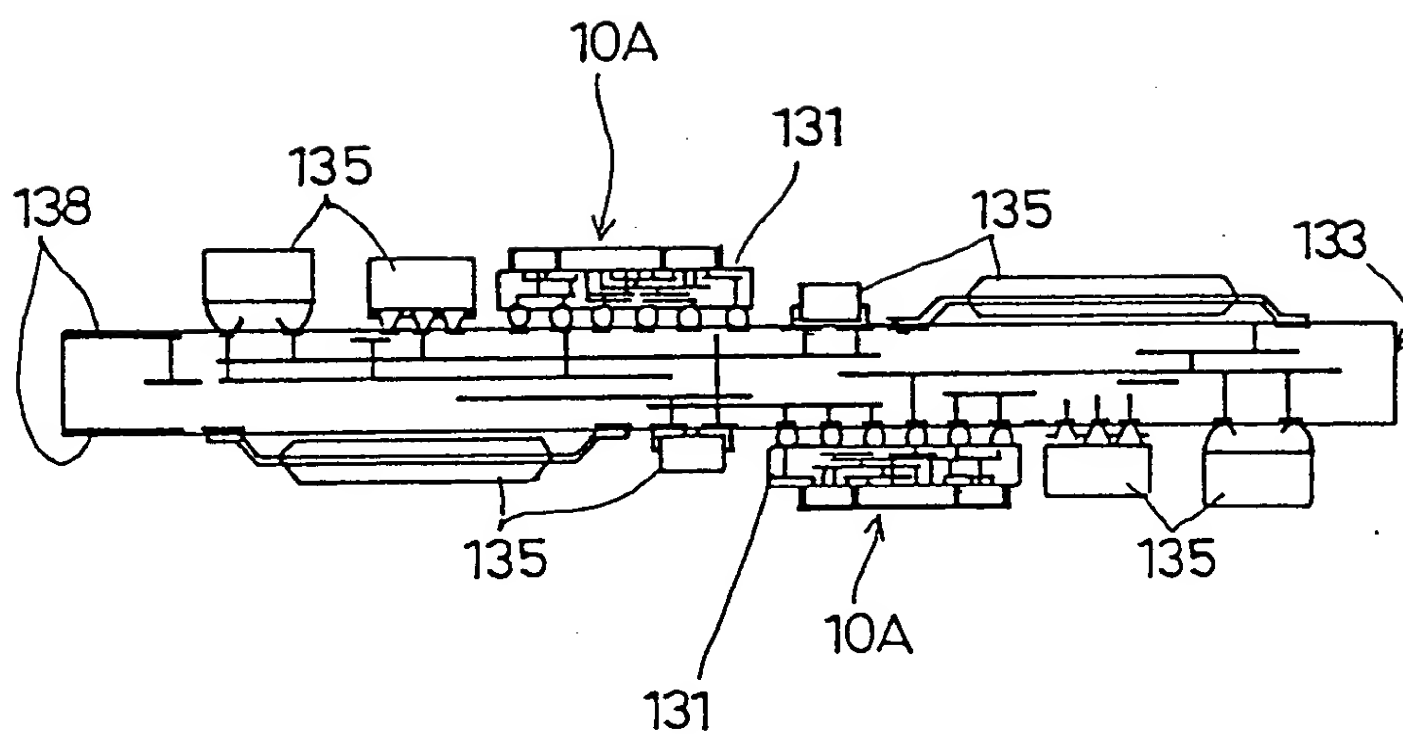
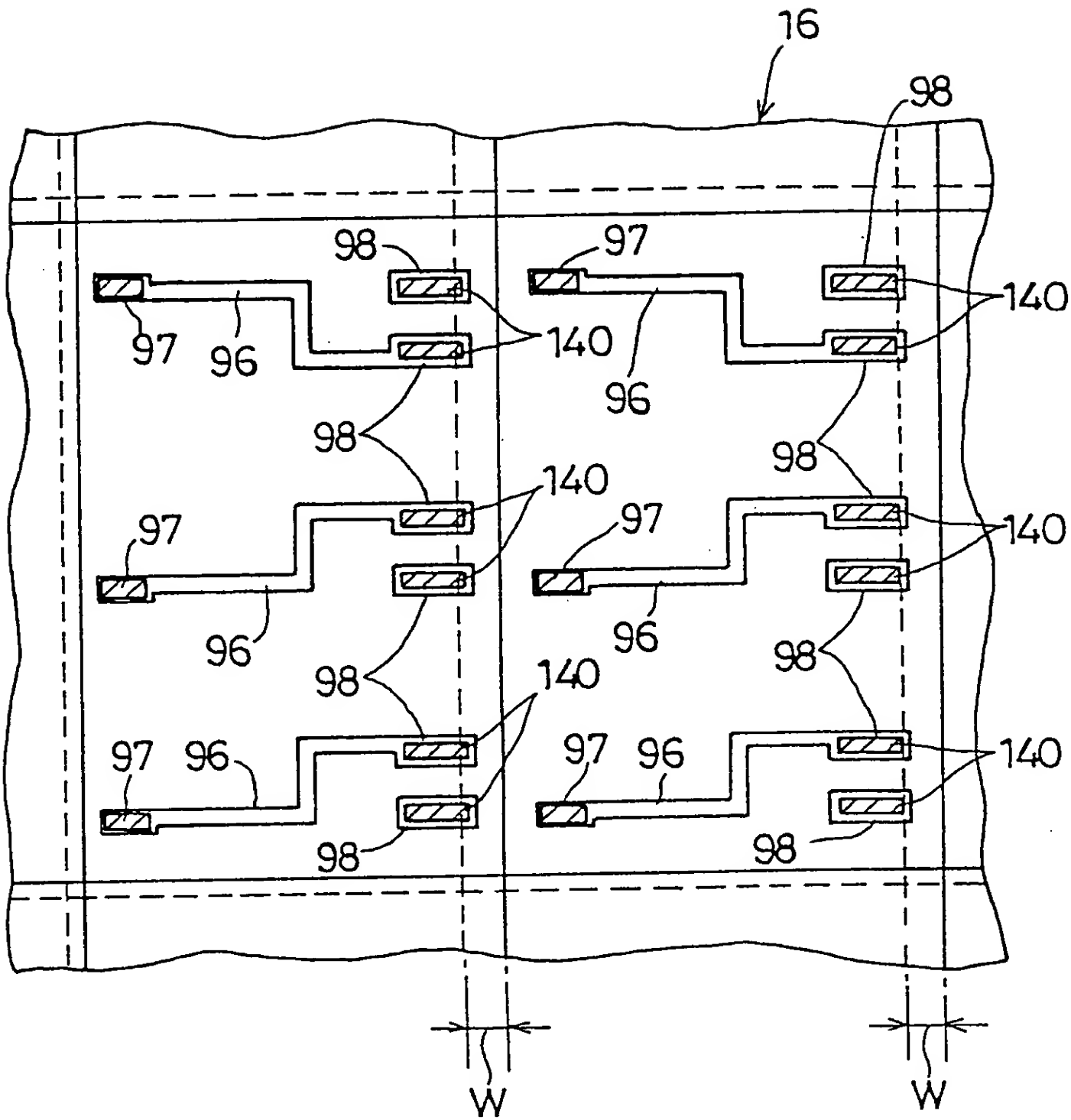
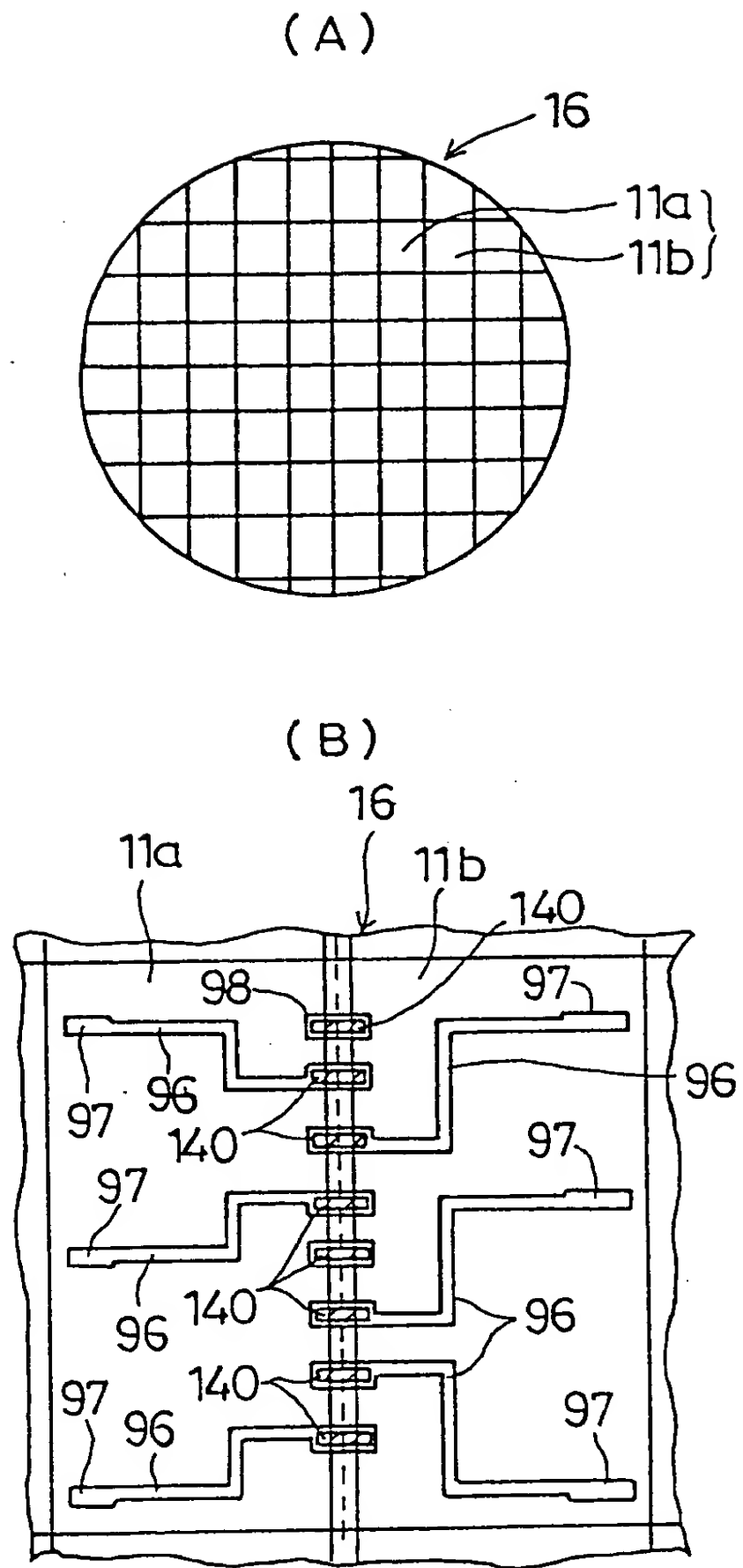


Fig. 59



| 1990-1991 |  | 1991-1992 |  | 1992-1993 |  | 1993-1994 |  | 1994-1995 |  | 1995-1996 |  | 1996-1997 |  | 1997-1998 |  | 1998-1999 |  | 1999-2000 |  | 2000-2001 |  | 2001-2002 |  | 2002-2003 |  | 2003-2004 |  | 2004-2005 |  | 2005-2006 |  | 2006-2007 |  | 2007-2008 |  | 2008-2009 |  | 2009-2010 |  | 2010-2011 |  | 2011-2012 |  | 2012-2013 |  | 2013-2014 |  | 2014-2015 |  | 2015-2016 |  | 2016-2017 |  | 2017-2018 |  | 2018-2019 |  | 2019-2020 |  | 2020-2021 |  | 2021-2022 |  | 2022-2023 |  | 2023-2024 |  | 2024-2025 |  | 2025-2026 |  | 2026-2027 |  | 2027-2028 |  | 2028-2029 |  | 2029-2030 |  | 2030-2031 |  | 2031-2032 |  | 2032-2033 |  | 2033-2034 |  | 2034-2035 |  | 2035-2036 |  | 2036-2037 |  | 2037-2038 |  | 2038-2039 |  | 2039-2040 |  | 2040-2041 |  | 2041-2042 |  | 2042-2043 |  | 2043-2044 |  | 2044-2045 |  | 2045-2046 |  | 2046-2047 |  | 2047-2048 |  | 2048-2049 |  | 2049-2050 |  | 2050-2051 |  | 2051-2052 |  | 2052-2053 |  | 2053-2054 |  | 2054-2055 |  | 2055-2056 |  | 2056-2057 |  | 2057-2058 |  | 2058-2059 |  | 2059-2060 |  | 2060-2061 |  | 2061-2062 |  | 2062-2063 |  | 2063-2064 |  | 2064-2065 |  | 2065-2066 |  | 2066-2067 |  | 2067-2068 |  | 2068-2069 |  | 2069-2070 |  | 2070-2071 |  | 2071-2072 |  | 2072-2073 |  | 2073-2074 |  | 2074-2075 |  | 2075-2076 |  | 2076-2077 |  | 2077-2078 |  | 2078-2079 |  | 2079-2080 |  | 2080-2081 |  | 2081-2082 |  | 2082-2083 |  | 2083-2084 |  | 2084-2085 |  | 2085-2086 |  | 2086-2087 |  | 2087-2088 |  | 2088-2089 |  | 2089-2090 |  | 2090-2091 |  | 2091-2092 |  | 2092-2093 |  | 2093-2094 |  | 2094-2095 |  | 2095-2096 |  | 2096-2097 |  | 2097-2098 |  | 2098-2099 |  | 2099-2100 |  | 2100-2101 |  | 2101-2102 |  | 2102-2103 |  | 2103-2104 |  | 2104-2105 |  | 2105-2106 |  | 2106-2107 |  | 2107-2108 |  | 2108-2109 |  | 2109-2110 |  | 2110-2111 |  | 2111-2112 |  | 2112-2113 |  | 2113-2114 |  | 2114-2115 |  | 2115-2116 |  | 2116-2117 |  | 2117-2118 |  | 2118-2119 |  | 2119-2120 |  | 2120-2121 |  | 2121-2122 |  | 2122-2123 |  | 2123-2124 |  | 2124-2125 |  | 2125-2126 |  | 2126-2127 |  | 2127-2128 |  | 2128-2129 |  | 2129-2130 |  | 2130-2131 |  | 2131-2132 |  | 2132-2133 |  | 2133-2134 |  | 2134-2135 |  | 2135-2136 |  | 2136-2137 |  | 2137-2138 |  | 2138-2139 |  | 2139-2140 |  | 2140-2141 |  | 2141-2142 |  | 2142-2143 |  | 2143-2144 |  | 2144-2145 |  | 2145-2146 |  | 2146-2147 |  | 2147-2148 |  | 2148-2149 |  | 2149-2150 |  | 2150-2151 |  | 2151-2152 |  | 2152-2153 |  | 2153-2154 |  | 2154-2155 |  | 2155-2156 |  | 2156-2157 |  | 2157-2158 |  | 2158-2159 |  | 2159-2160 |  | 2160-2161 |  | 2161-2162 |  | 2162-2163 |  | 2163-2164 |  | 2164-2165 |  | 2165-2166 |  | 2166-2167 |  | 2167-2168 |  | 2168-2169 |  | 2169-2170 |  | 2170-2171 |  | 2171-2172 |  | 2172-2173 |  | 2173-2174 |  | 2174-2175 |  | 2175-2176 |  | 2176-2177 |  | 2177-2178 |  | 2178-2179 |  | 2179-2180 |  | 2180-2181 |  | 2181-2182 |  | 2182-2183 |  | 2183-2184 |  | 2184-2185 |  | 2185-2186 |  | 2186-2187 |  | 2187-2188 |  | 2188-2189 |  | 2189-2190 |  | 2190-2191 |  | 2191-2192 |  | 2192-2193 |  | 2193-2194 |  | 2194-2195 |  | 2195-2196 |  | 2196-2197 |  | 2197-2198 |  | 2198-2199 |  | 2199-2200 |  | 2200-2201 |  | 2201-2202 |  | 2202-2203 |  | 2203-2204 |  | 2204-2205 |  | 2205-2206 |  | 2206-2207 |  | 2207-2208 |  | 2208-2209 |  | 2209-2210 |  | 2210-2211 |  | 2211-2212 |  | 2212-2213 |  | 2213-2214 |  | 2214-2215 |  | 2215-2216 |  | 2216-2217 |  |
|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|
|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|-----------|--|

**Fig. 60**



0976666-061901

Fig. 61

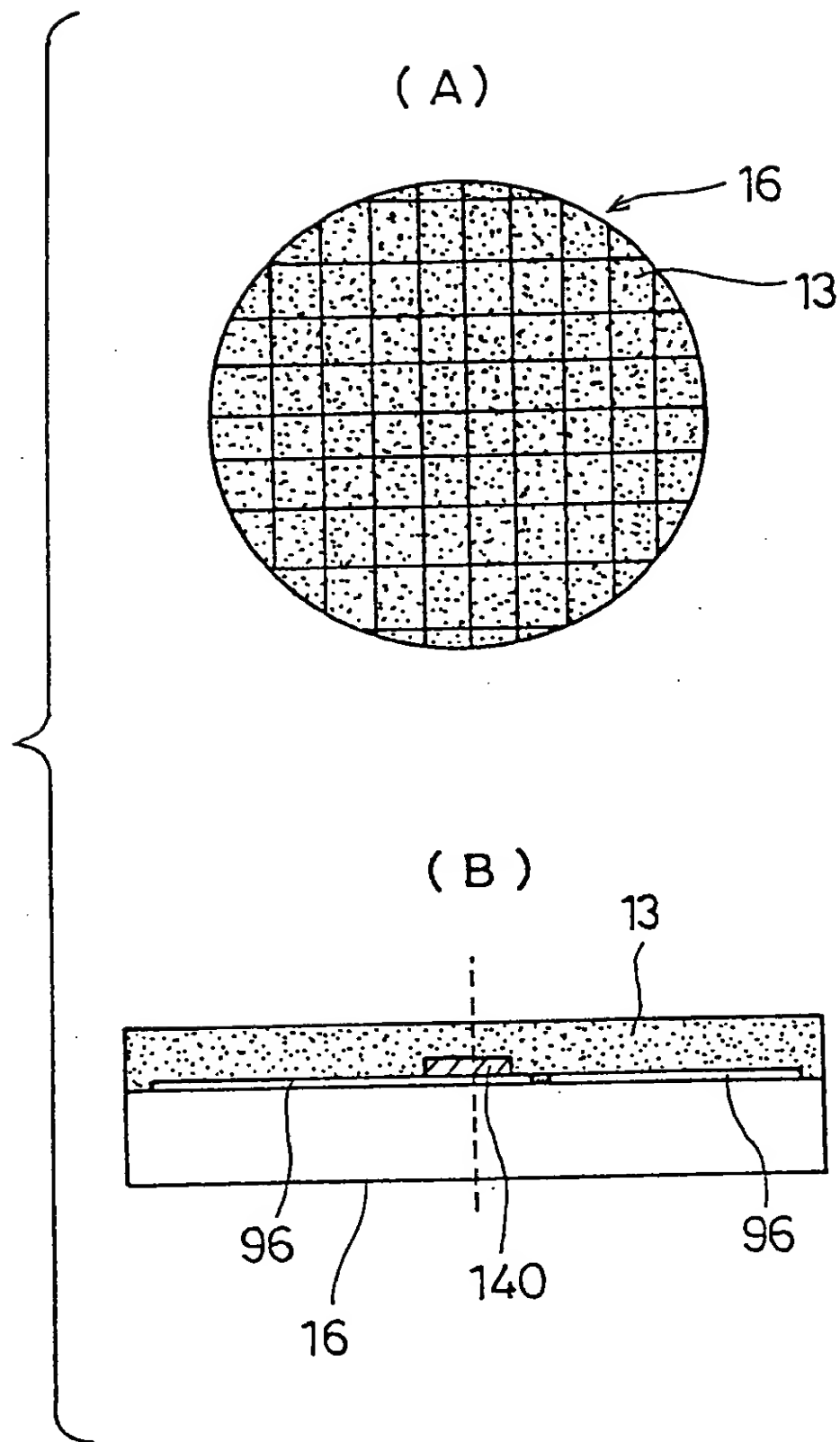


Fig. 62

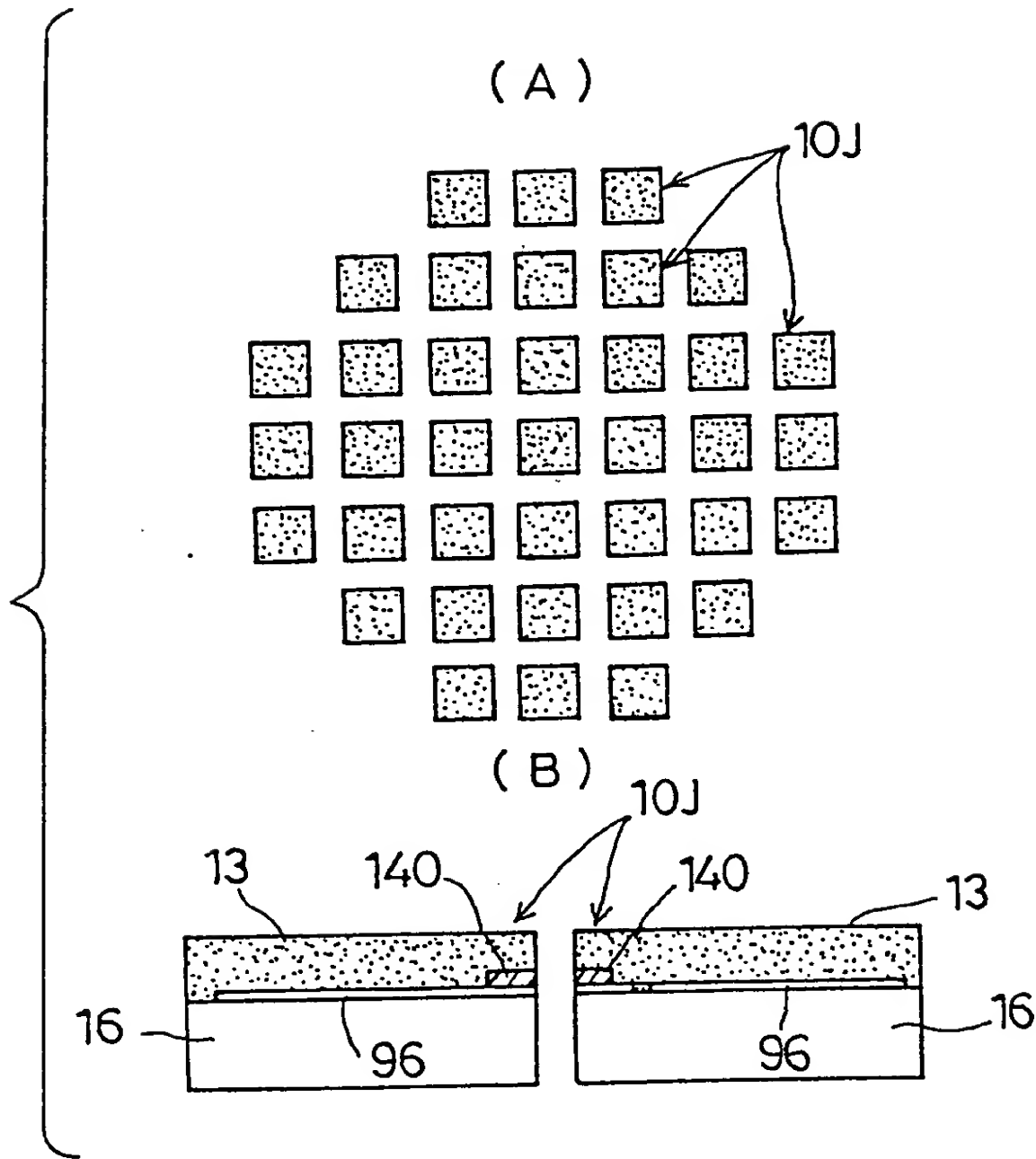


Fig. 63

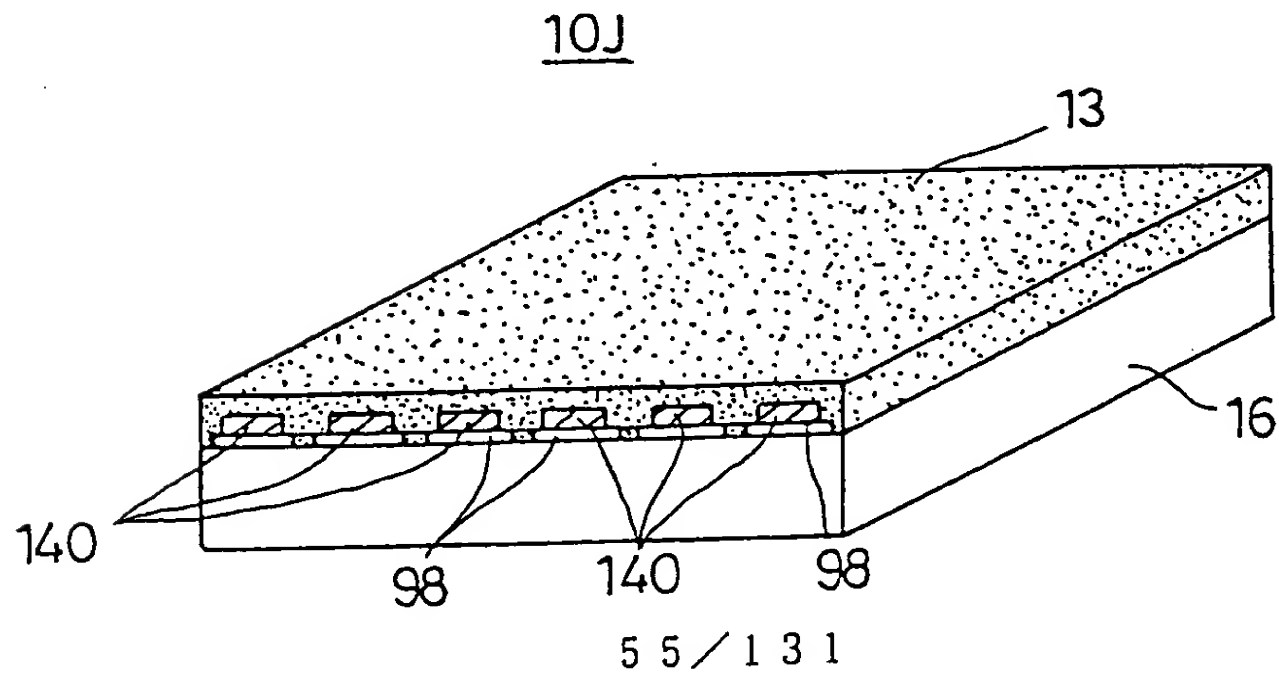
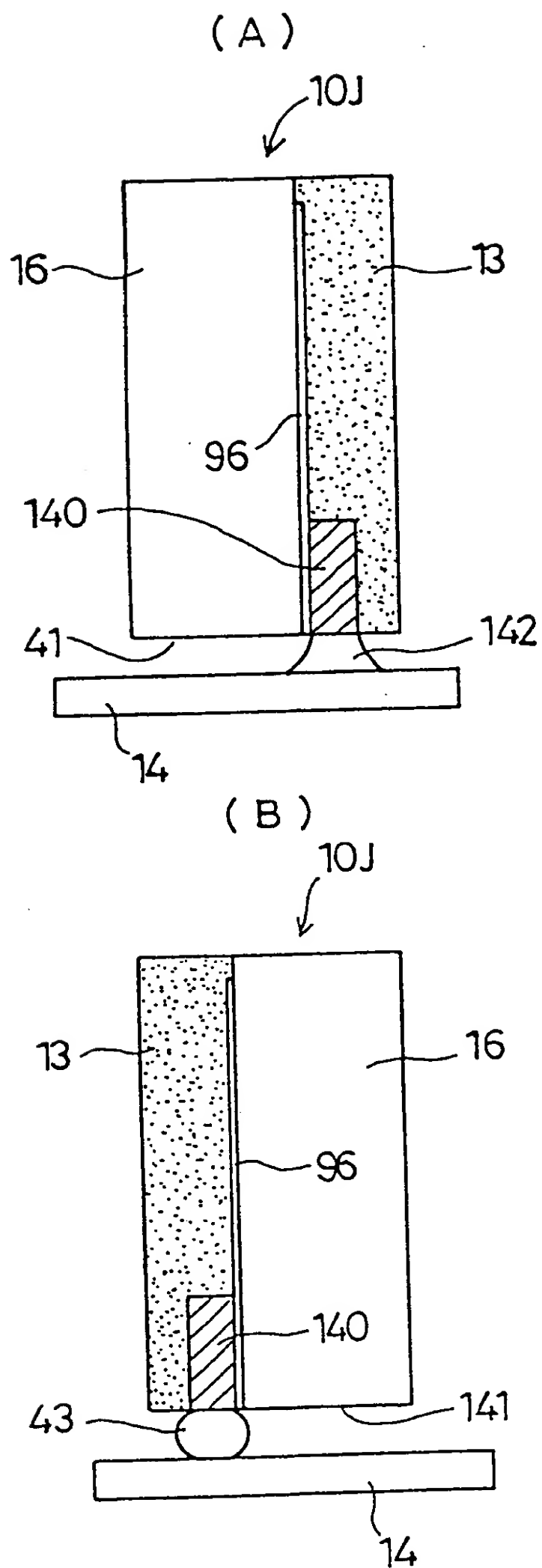


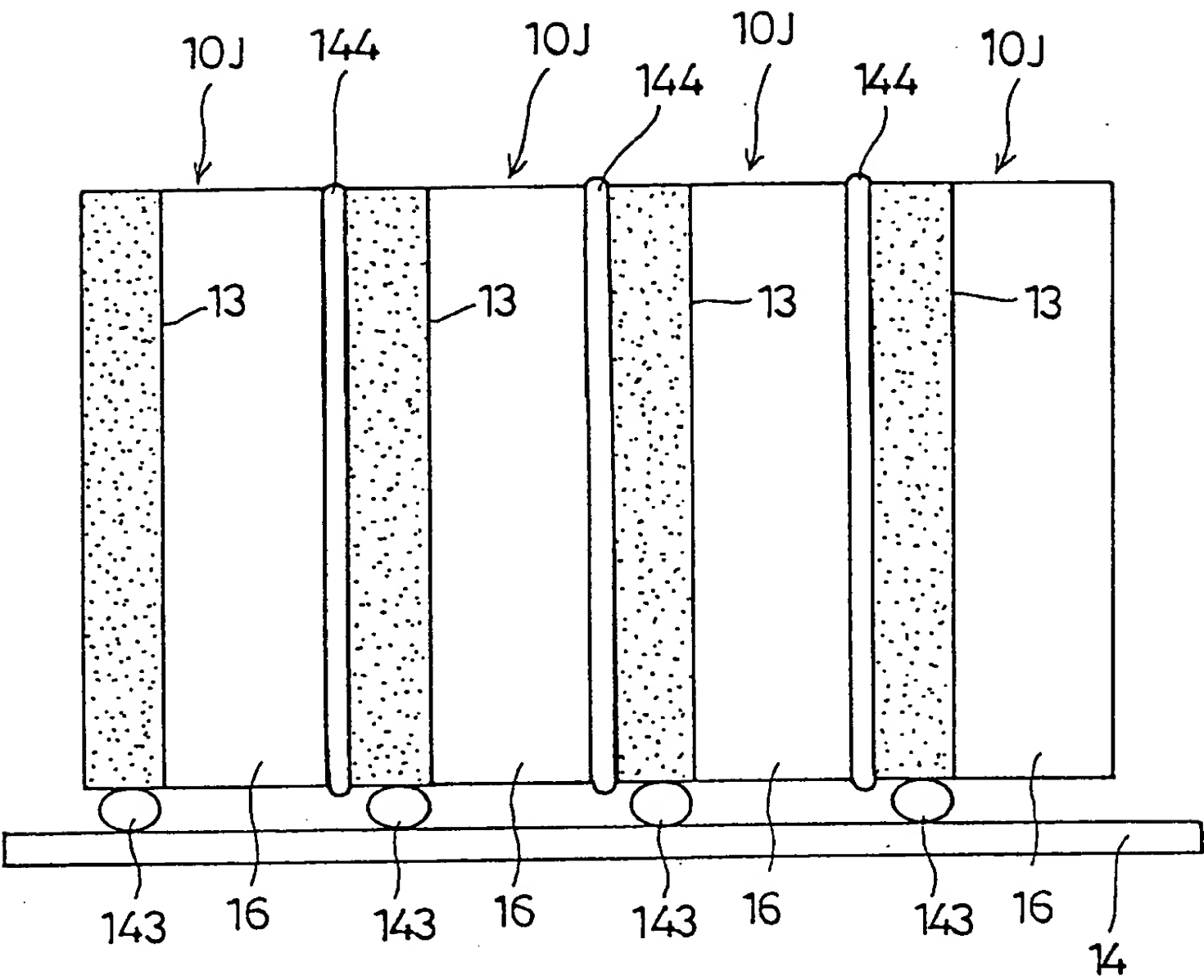
Fig. 64





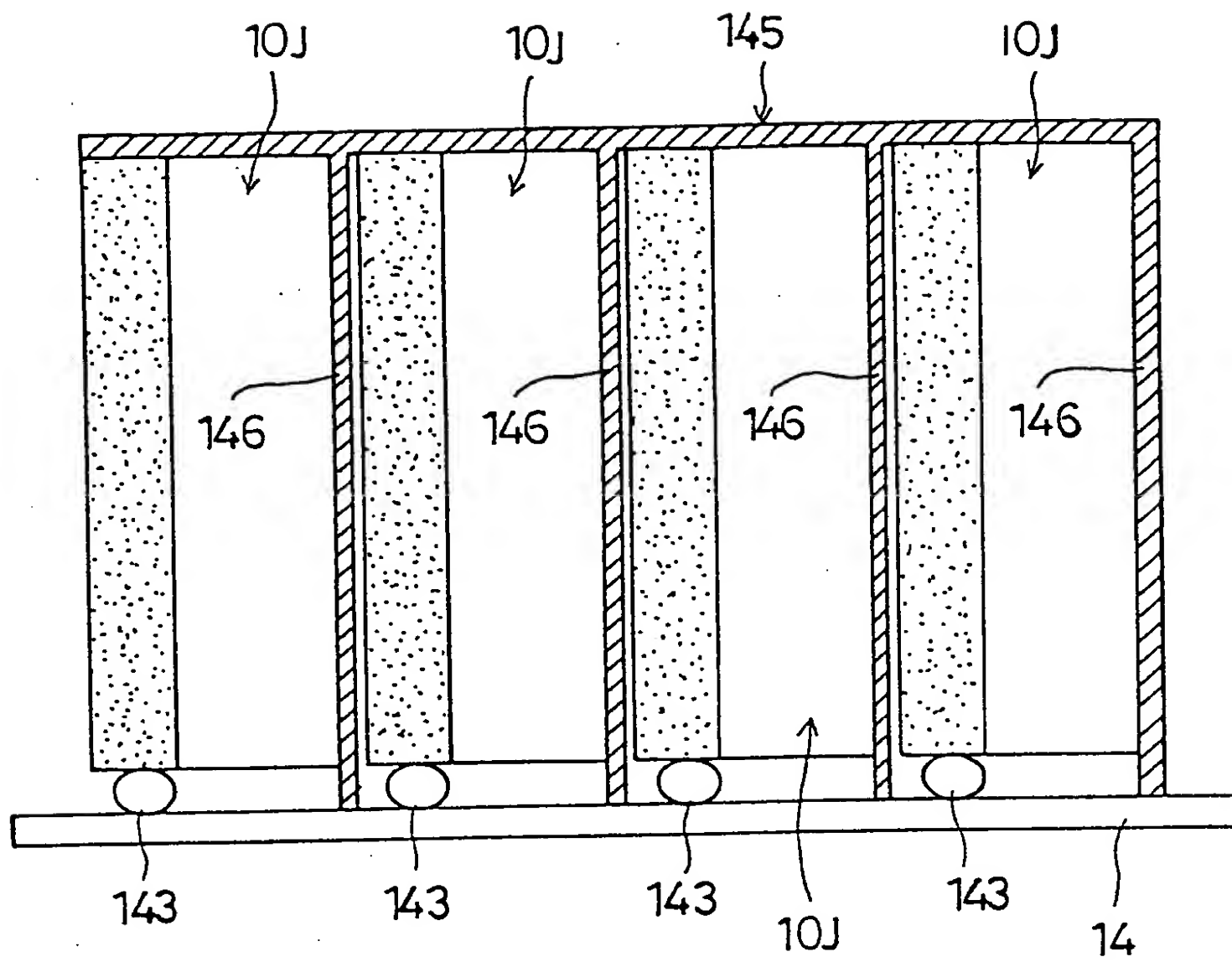
09766556 "061901

Fig. 65



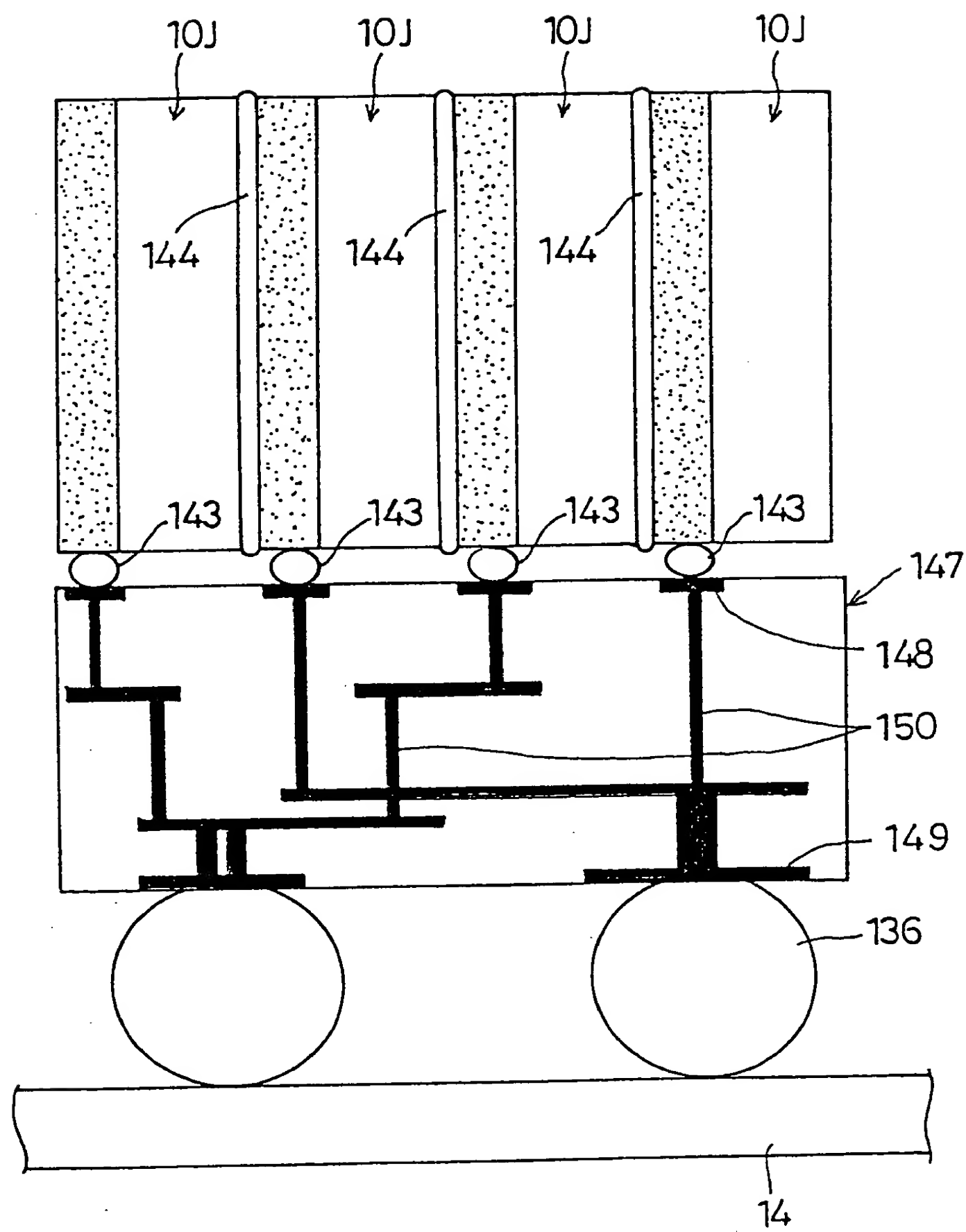
0976666-061001

Fig. 66



09/6666-061901

Fig. 67



09766666-061901

Fig. 68

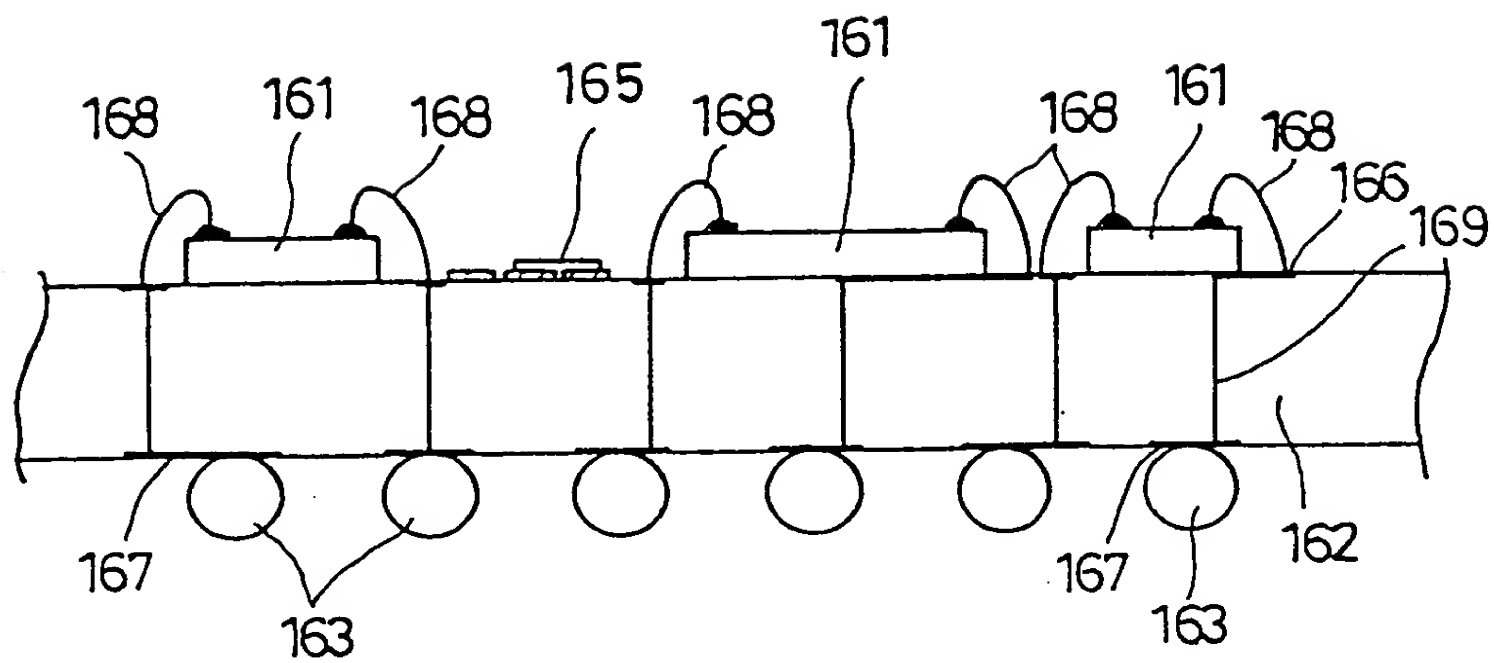


Fig. 69

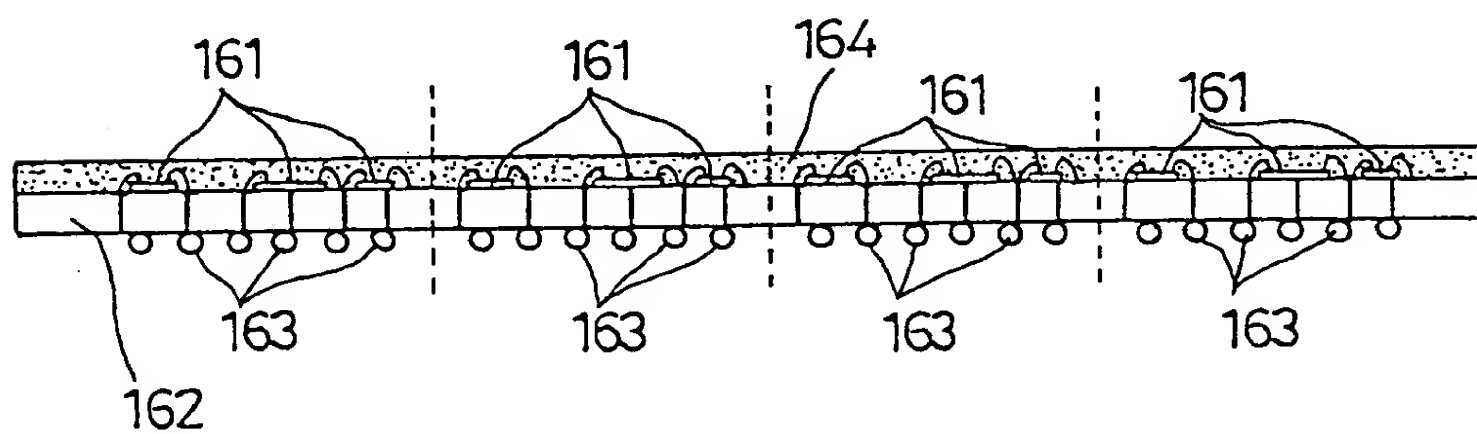


Fig. 70

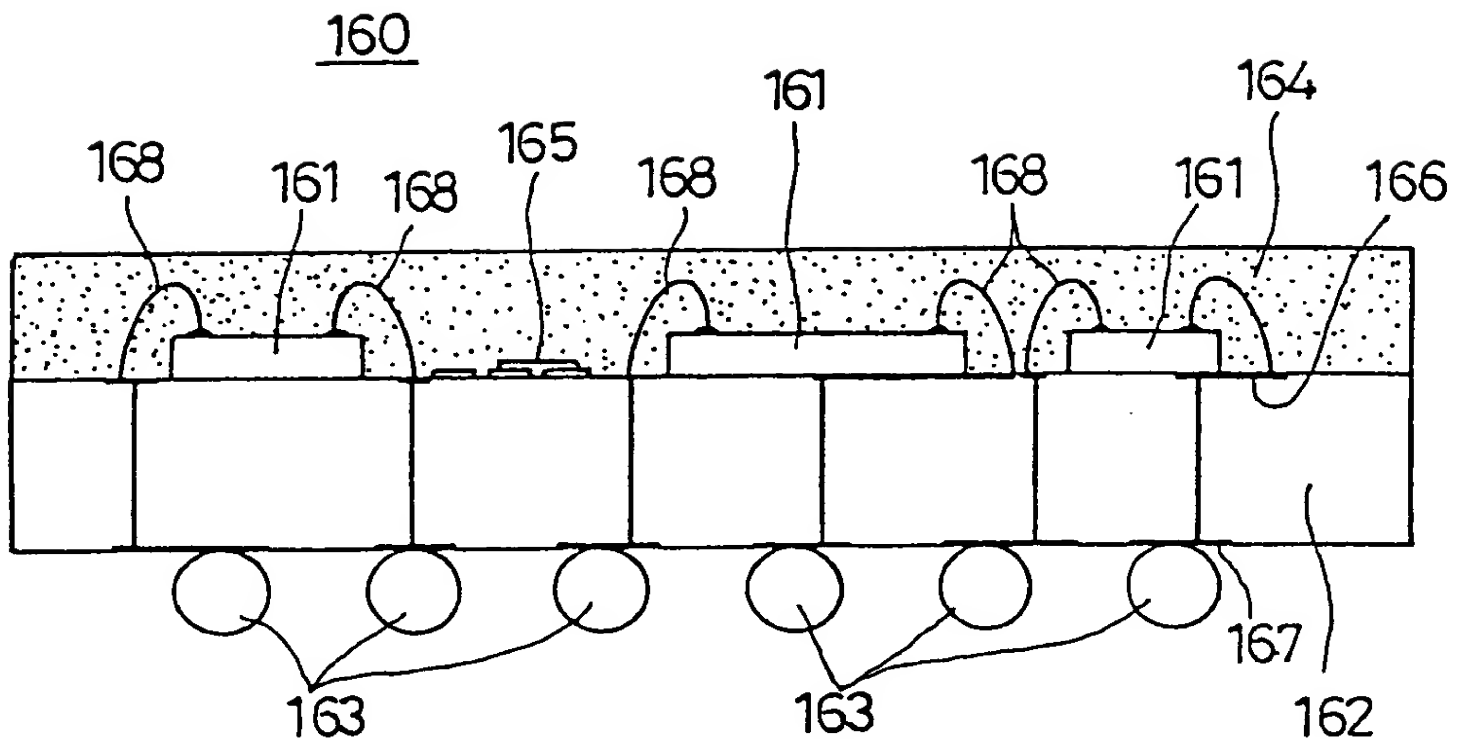
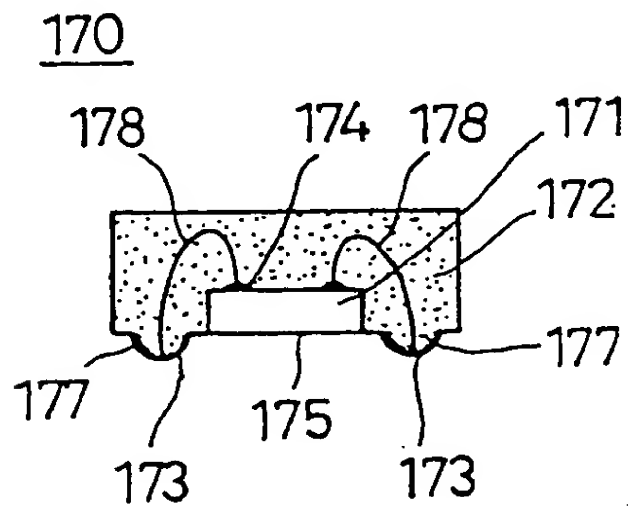


Fig. 71



0976656-061901

Fig. 72

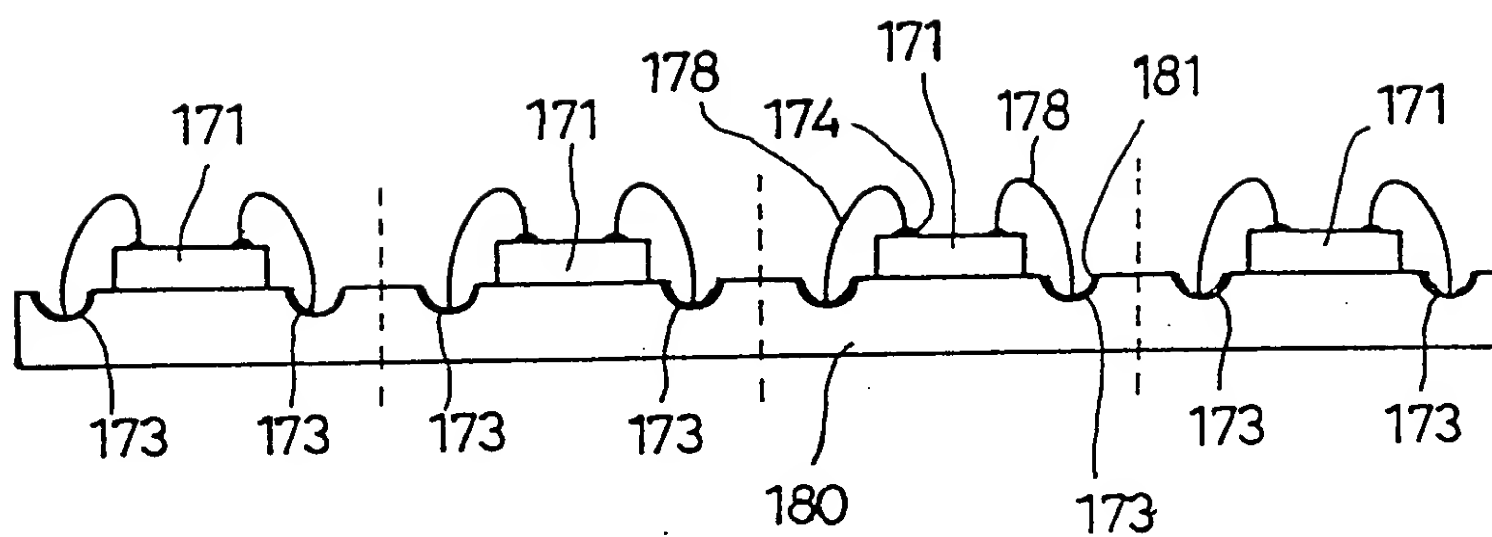


Fig. 73

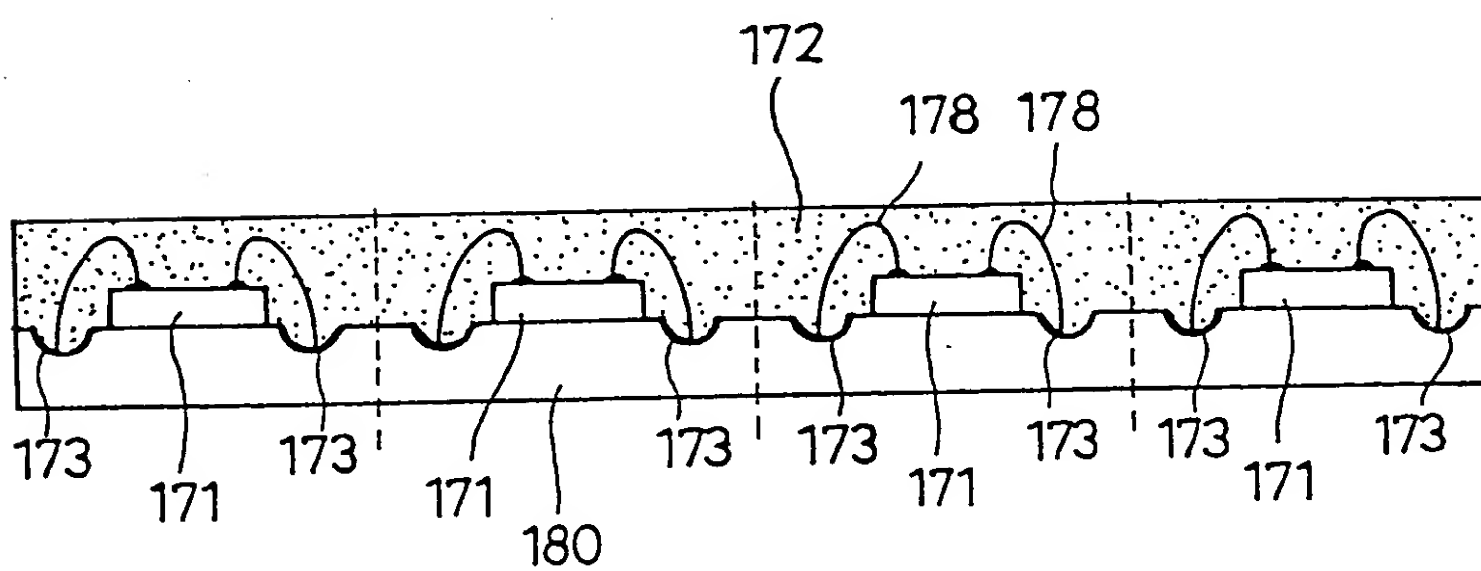


Fig. 74

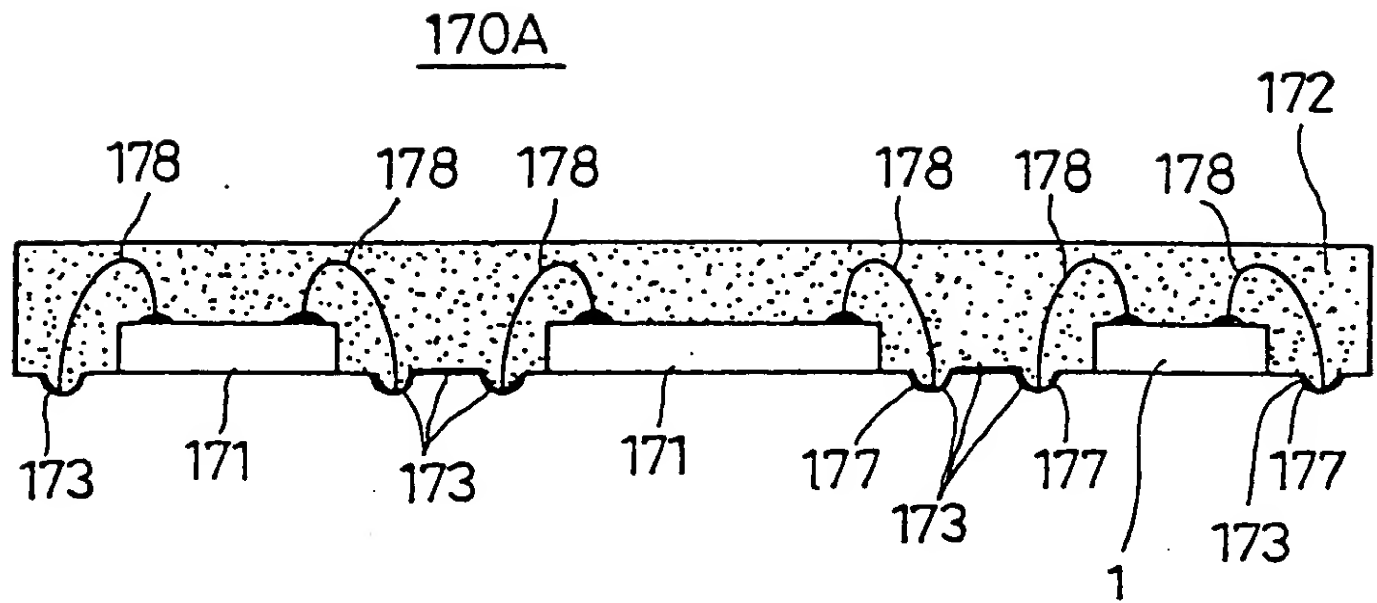


Fig. 75

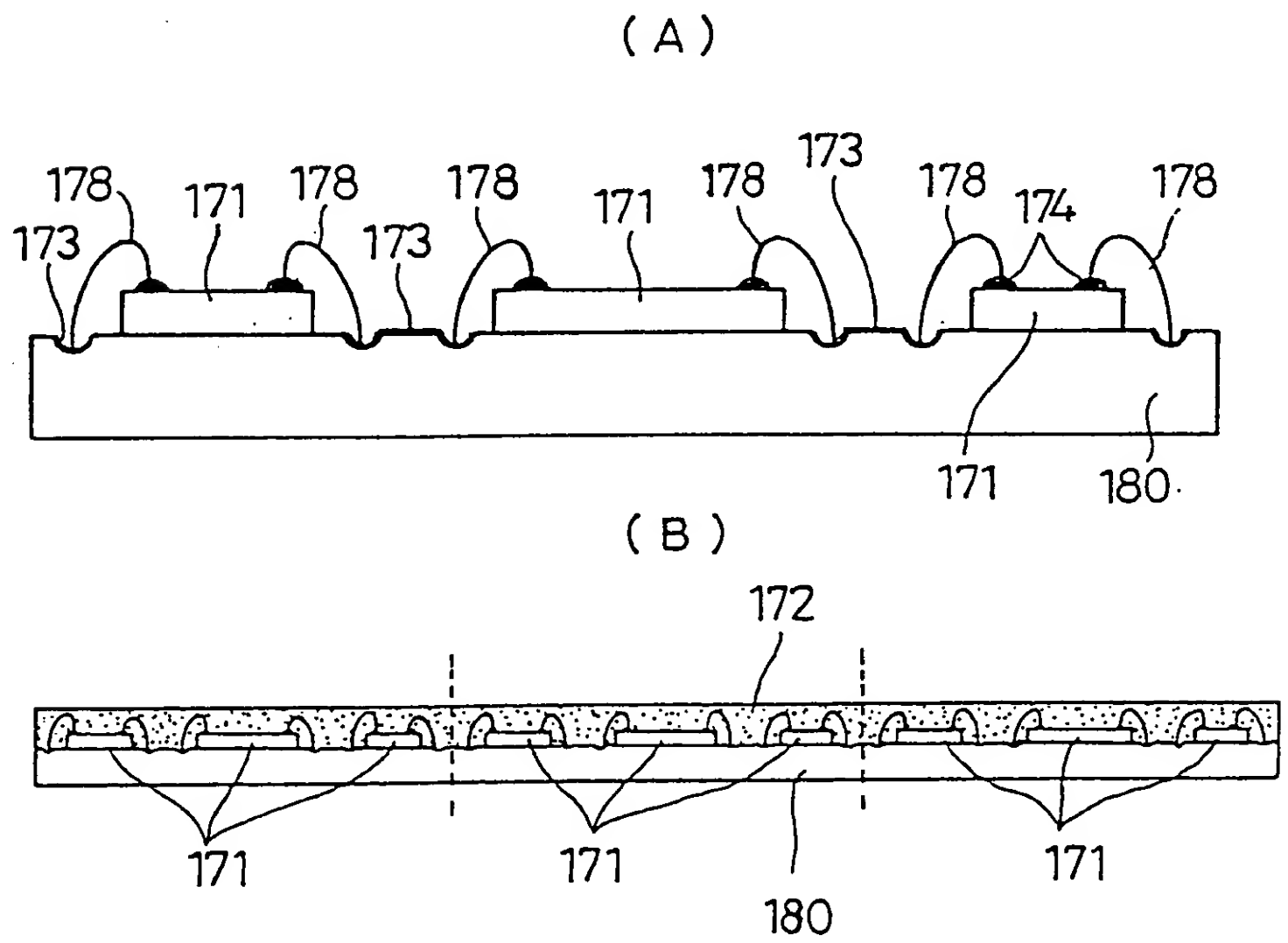


Fig. 76

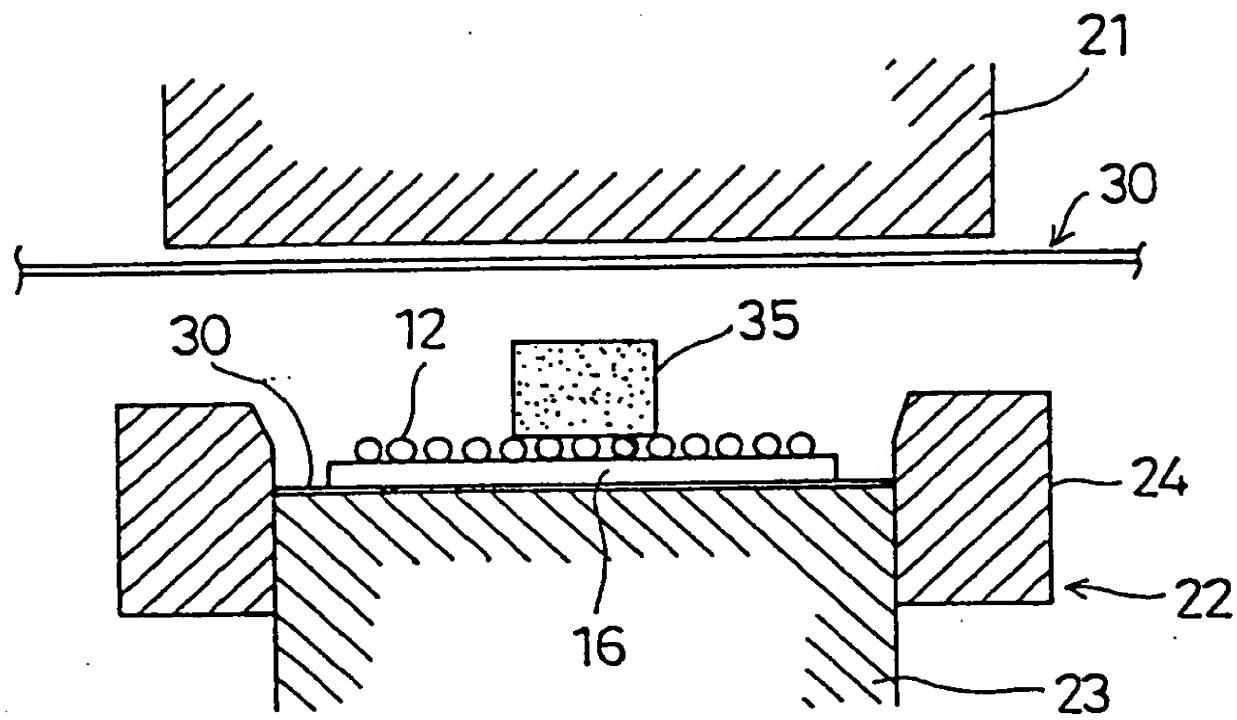


Fig. 77

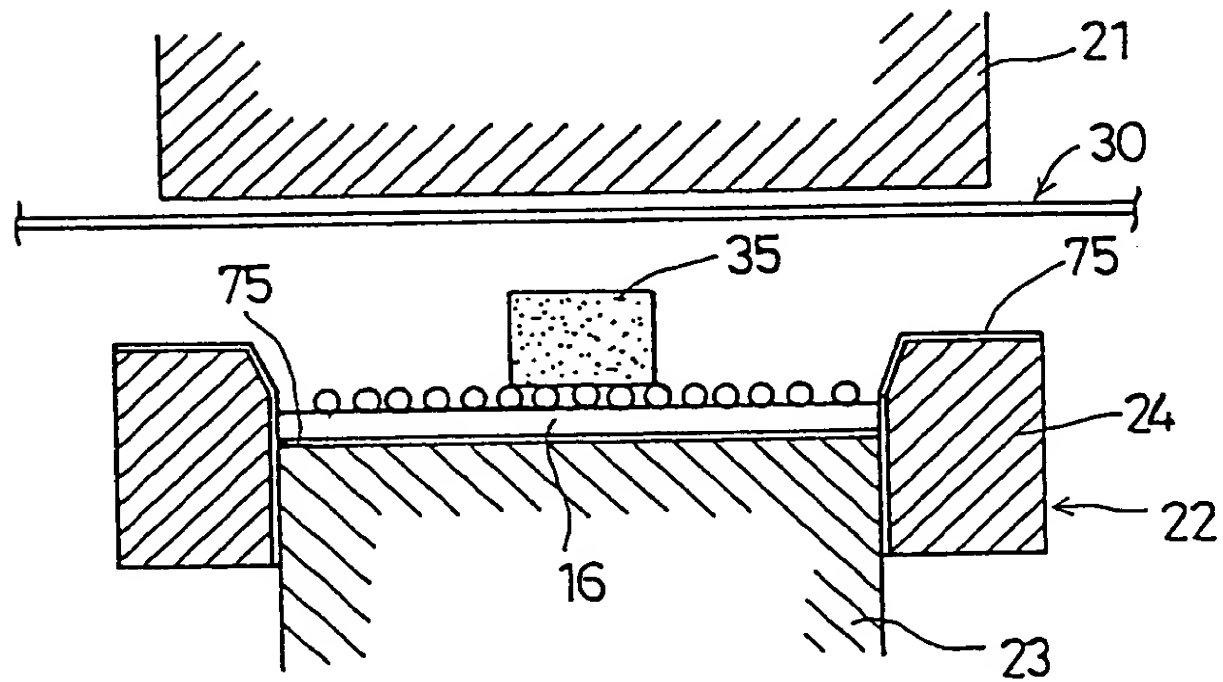






Fig. 79

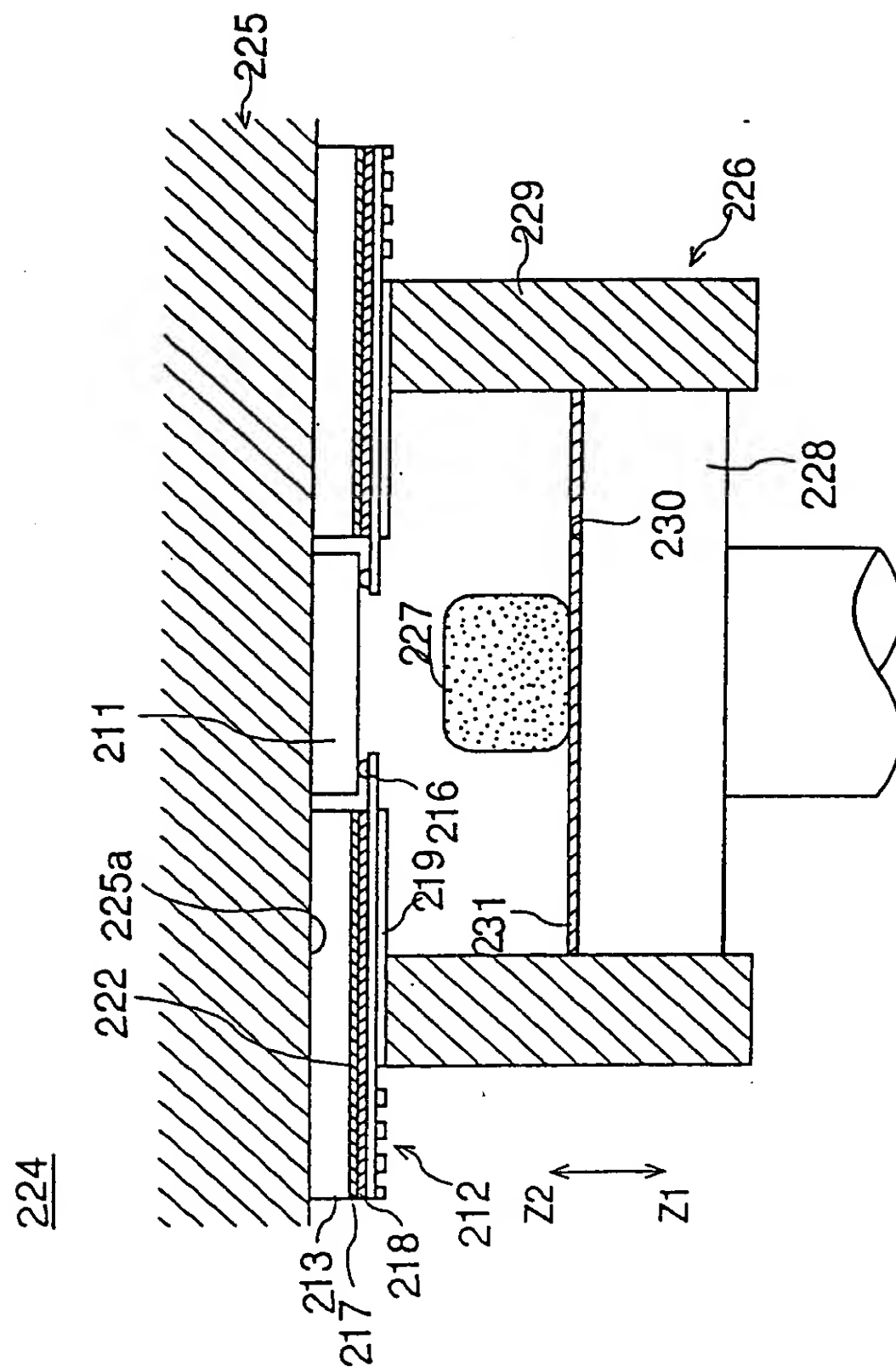


Fig. 80

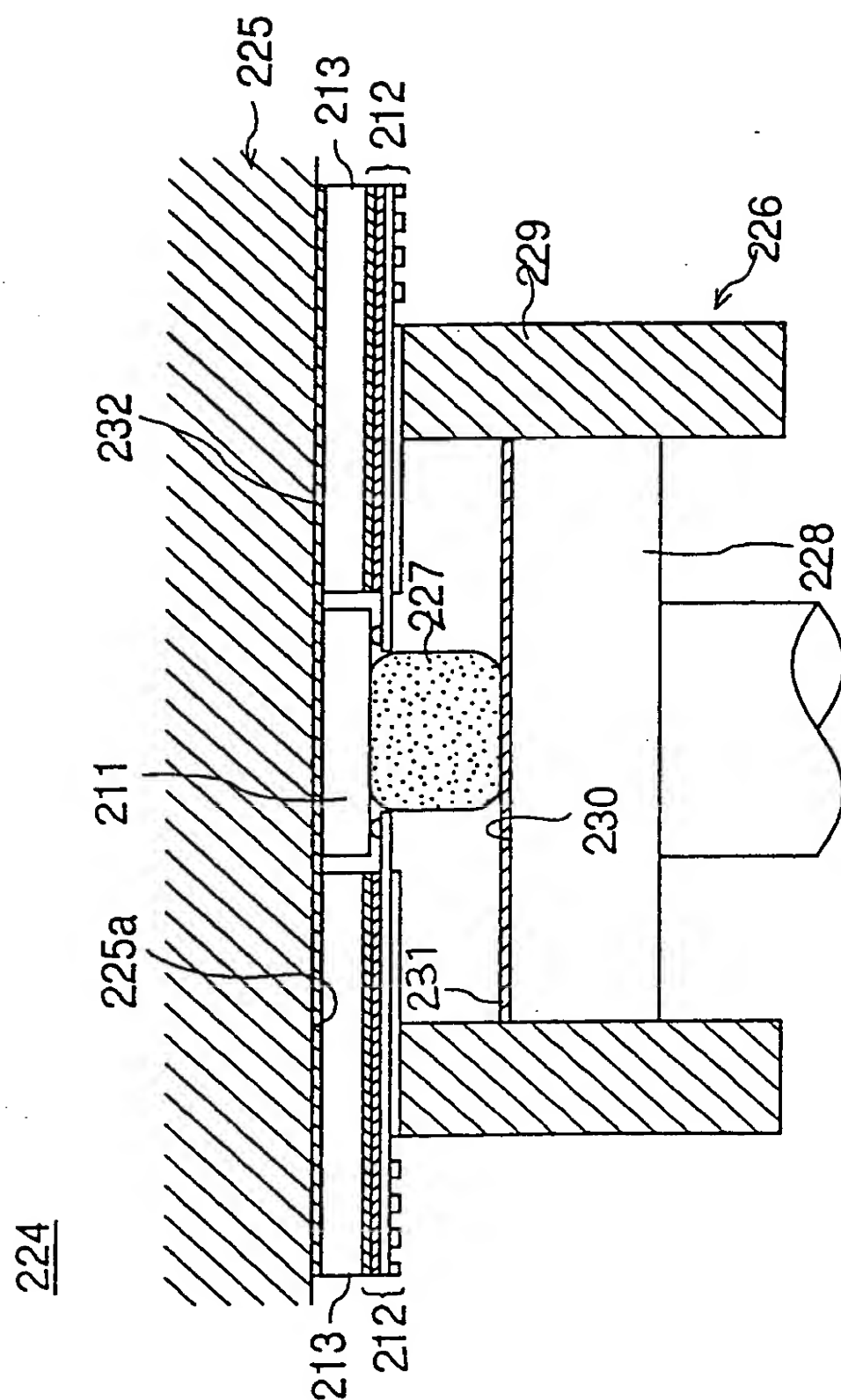


Fig. 81

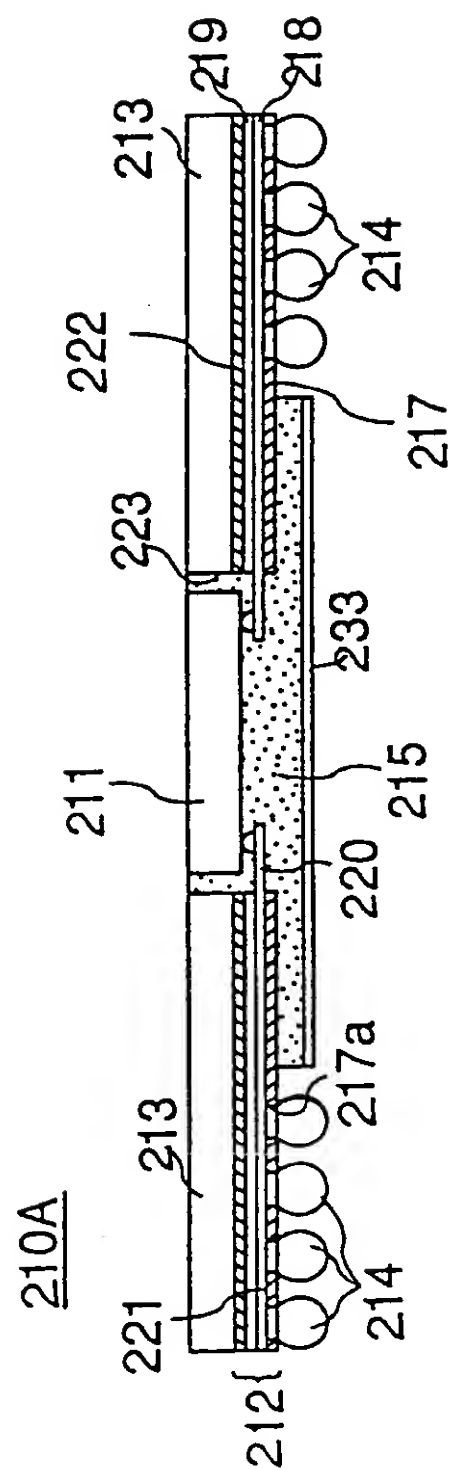


Fig. 82

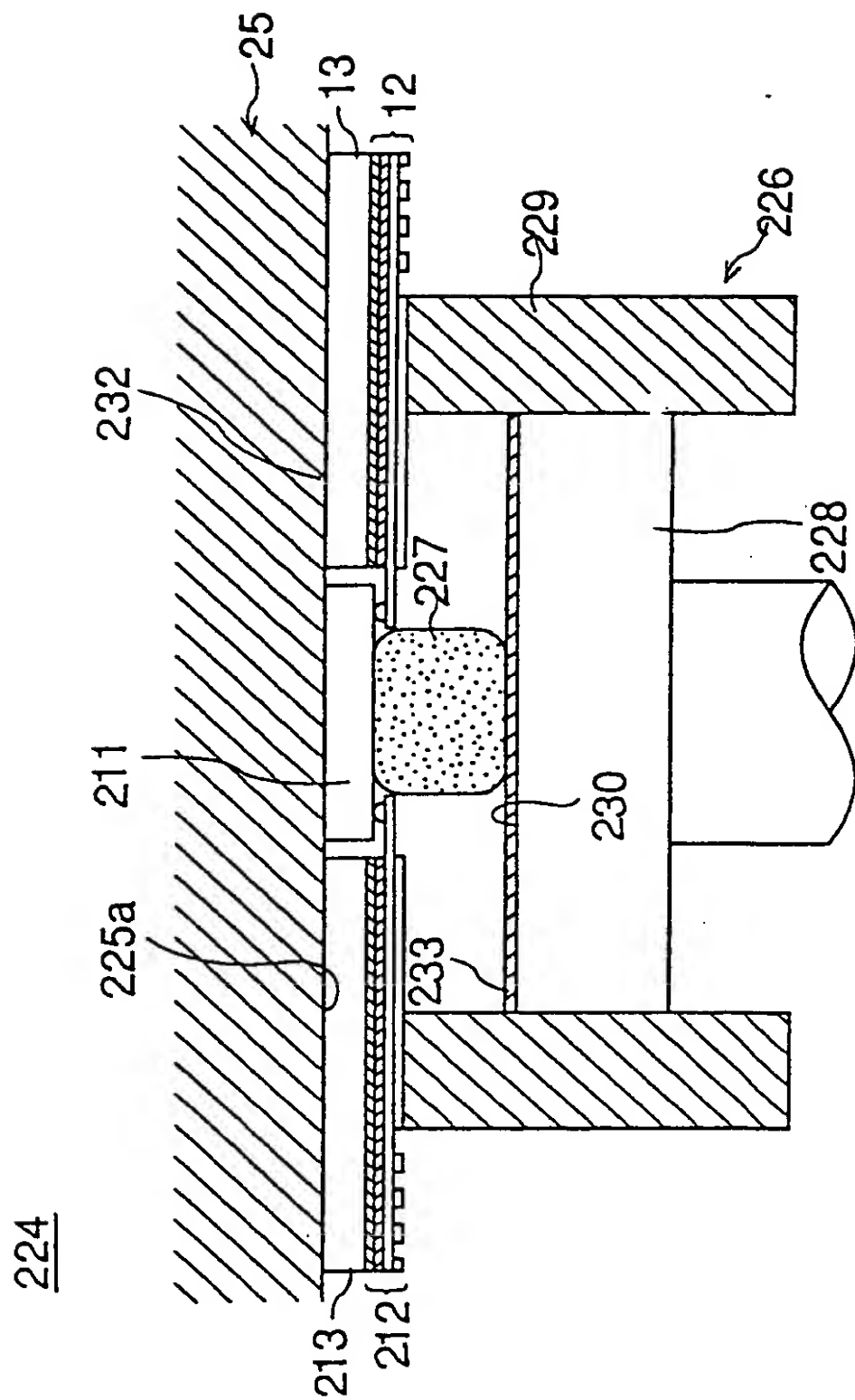


Fig. 83

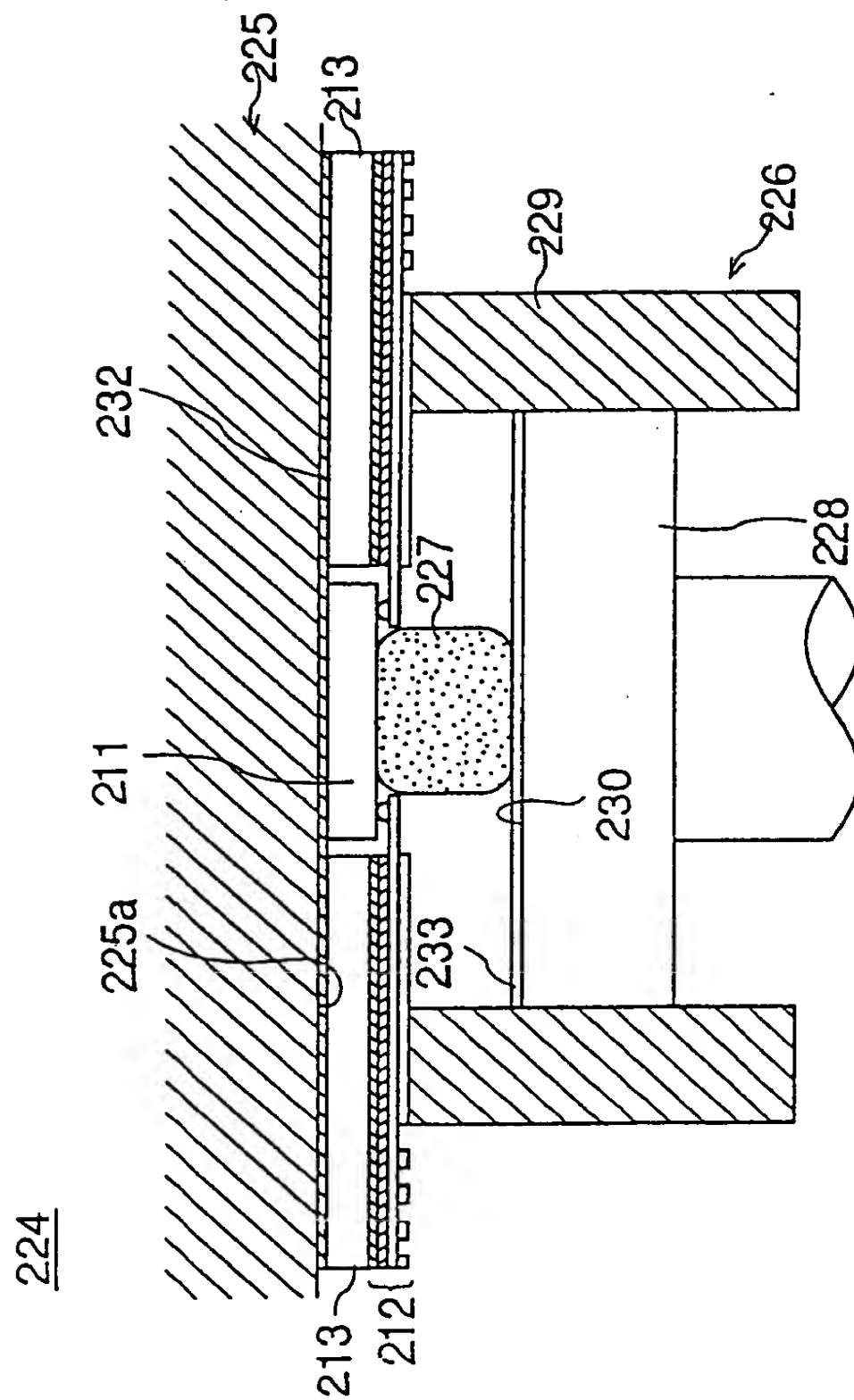


Fig. 84

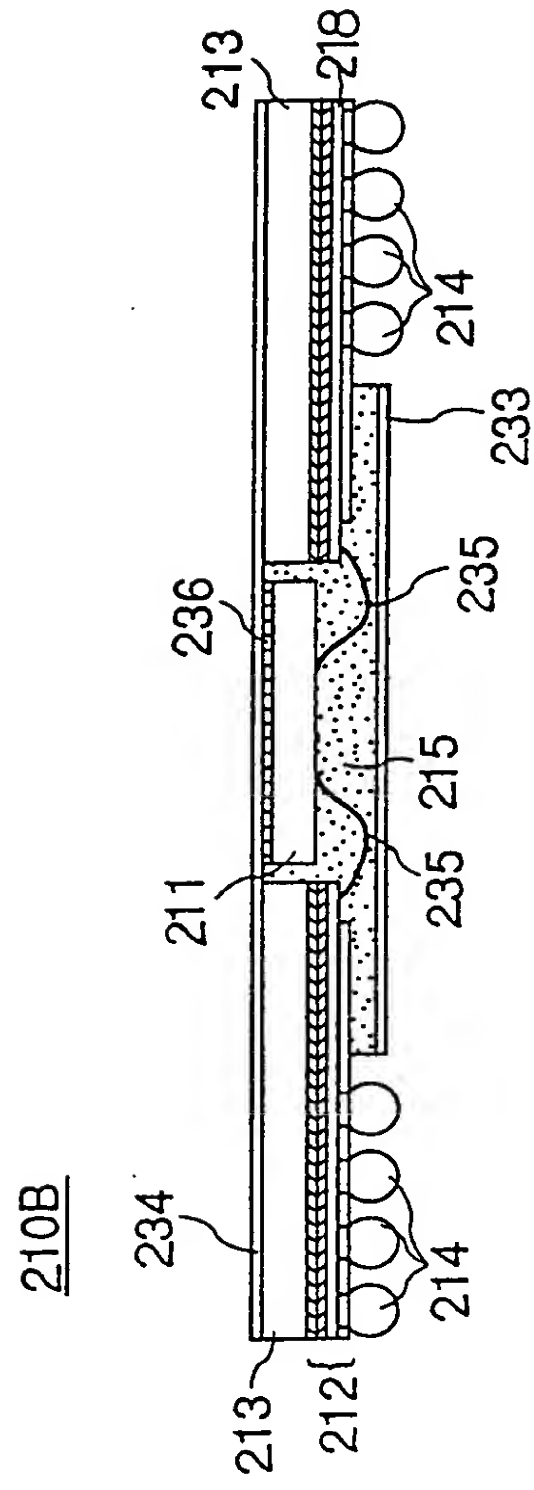
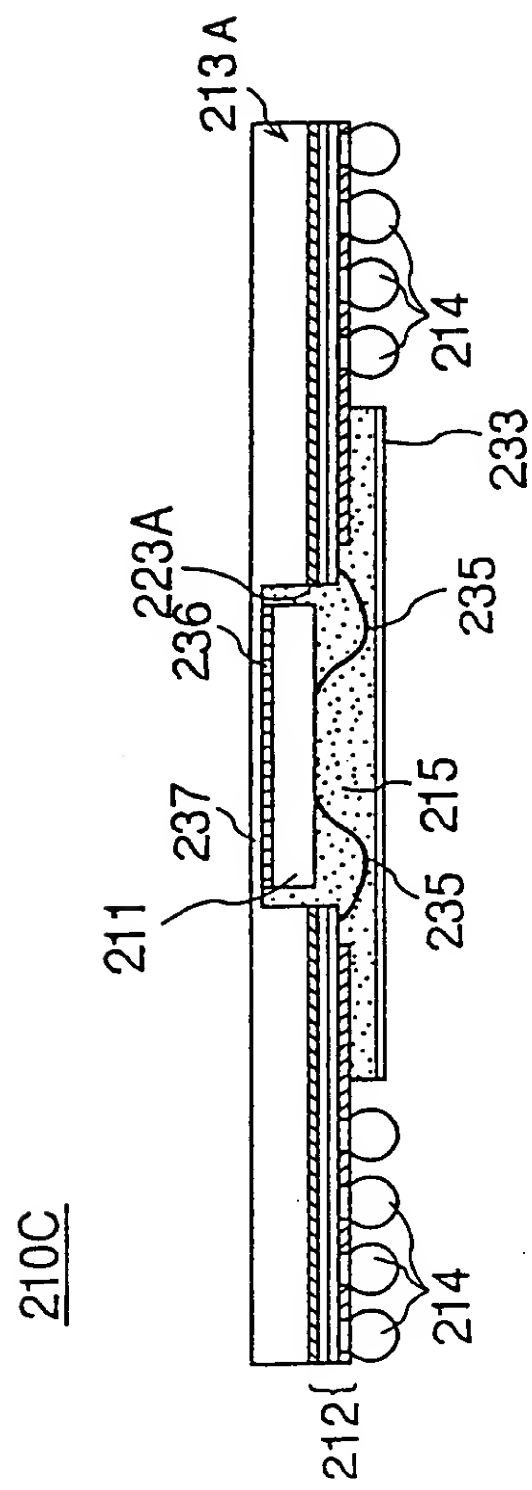


Fig. 85





0976656-061901

Fig. 86

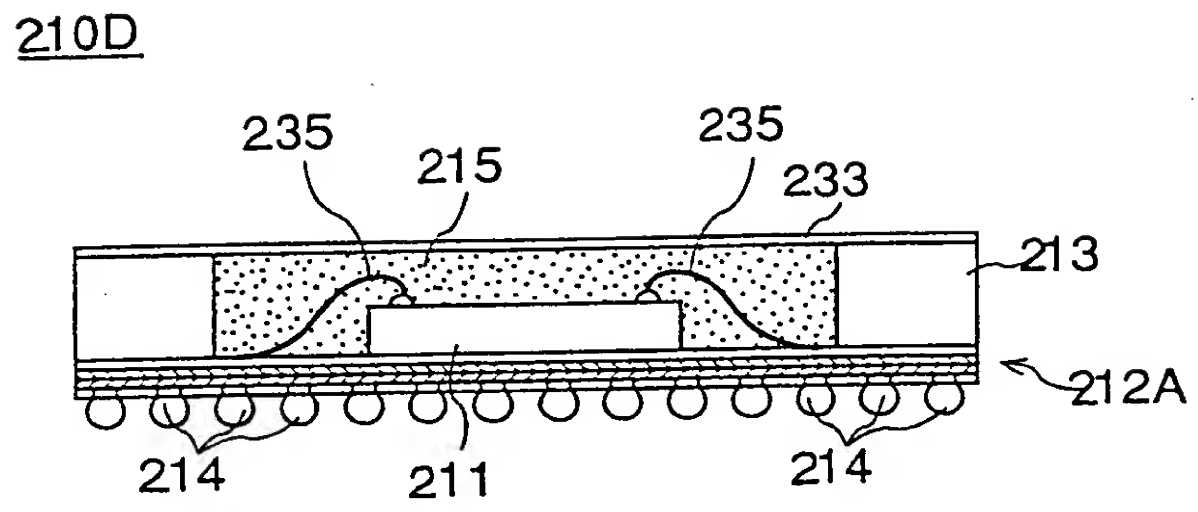




Fig. 88

210E

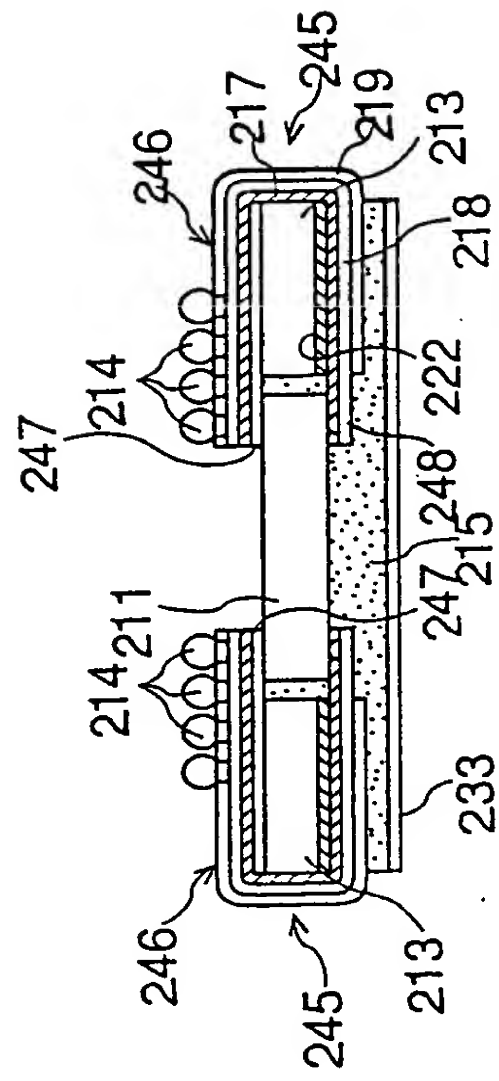


Fig. 89

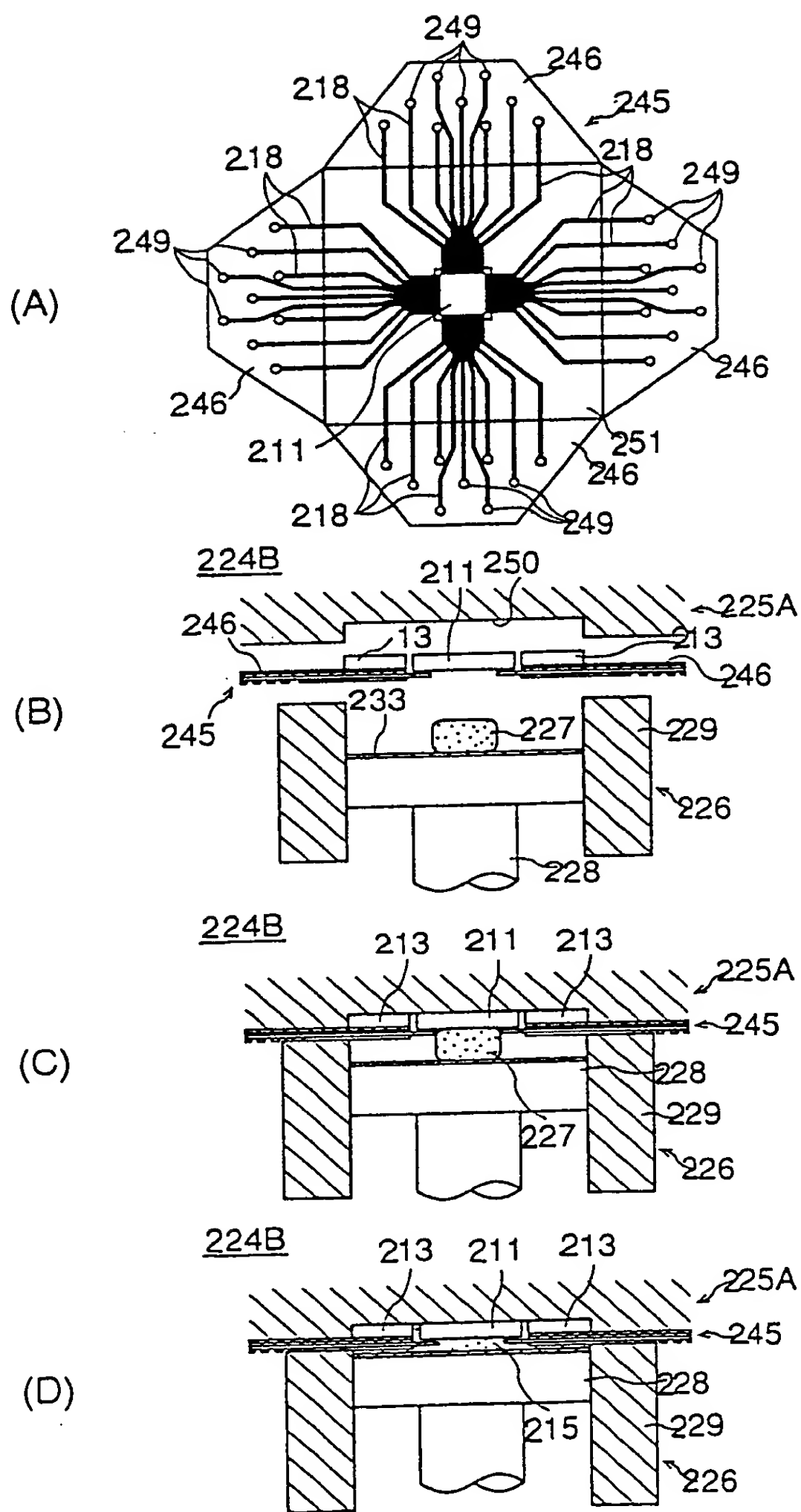


Fig. 90

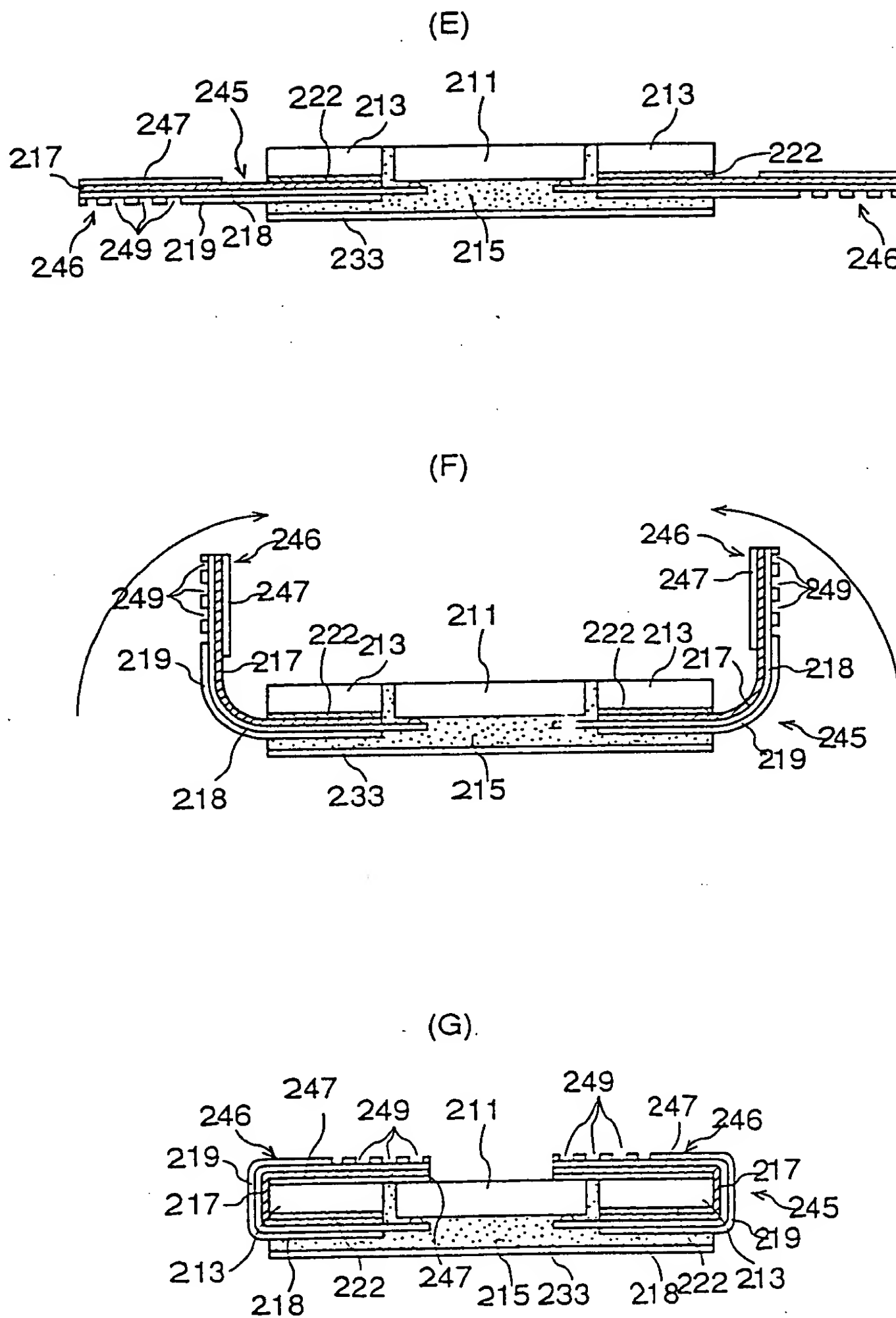


Fig. 91

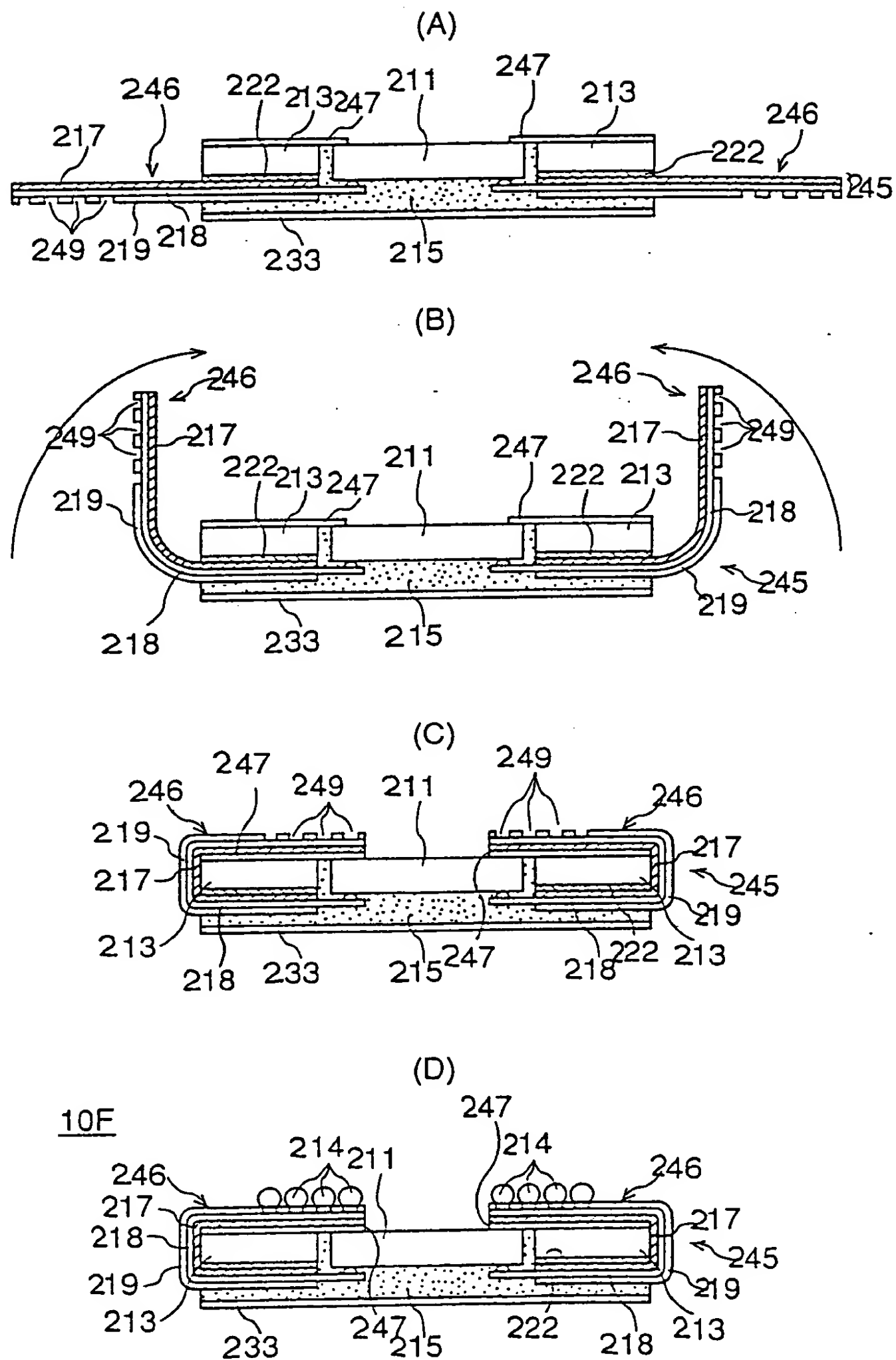


Fig. 92

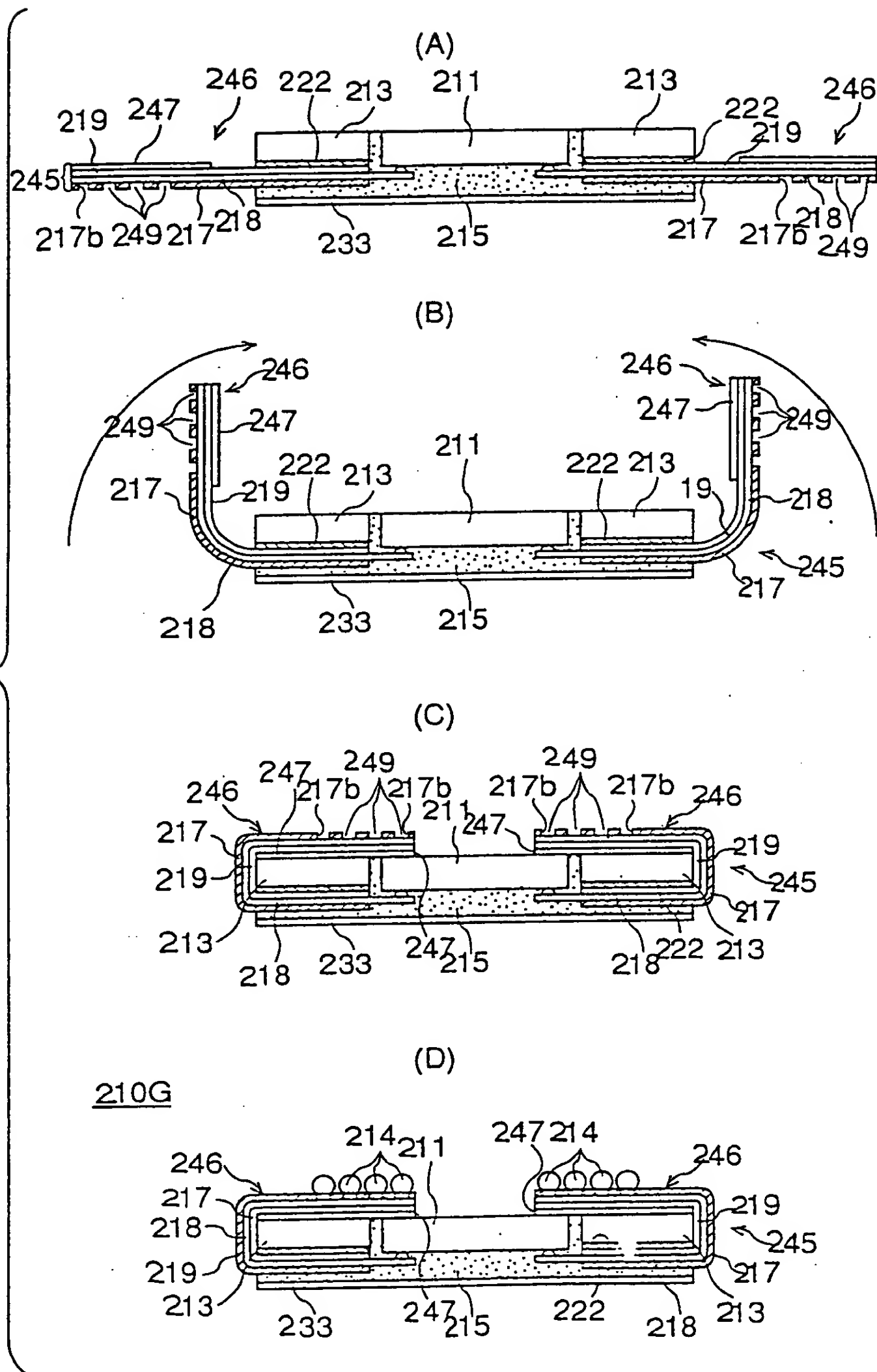


Fig. 93

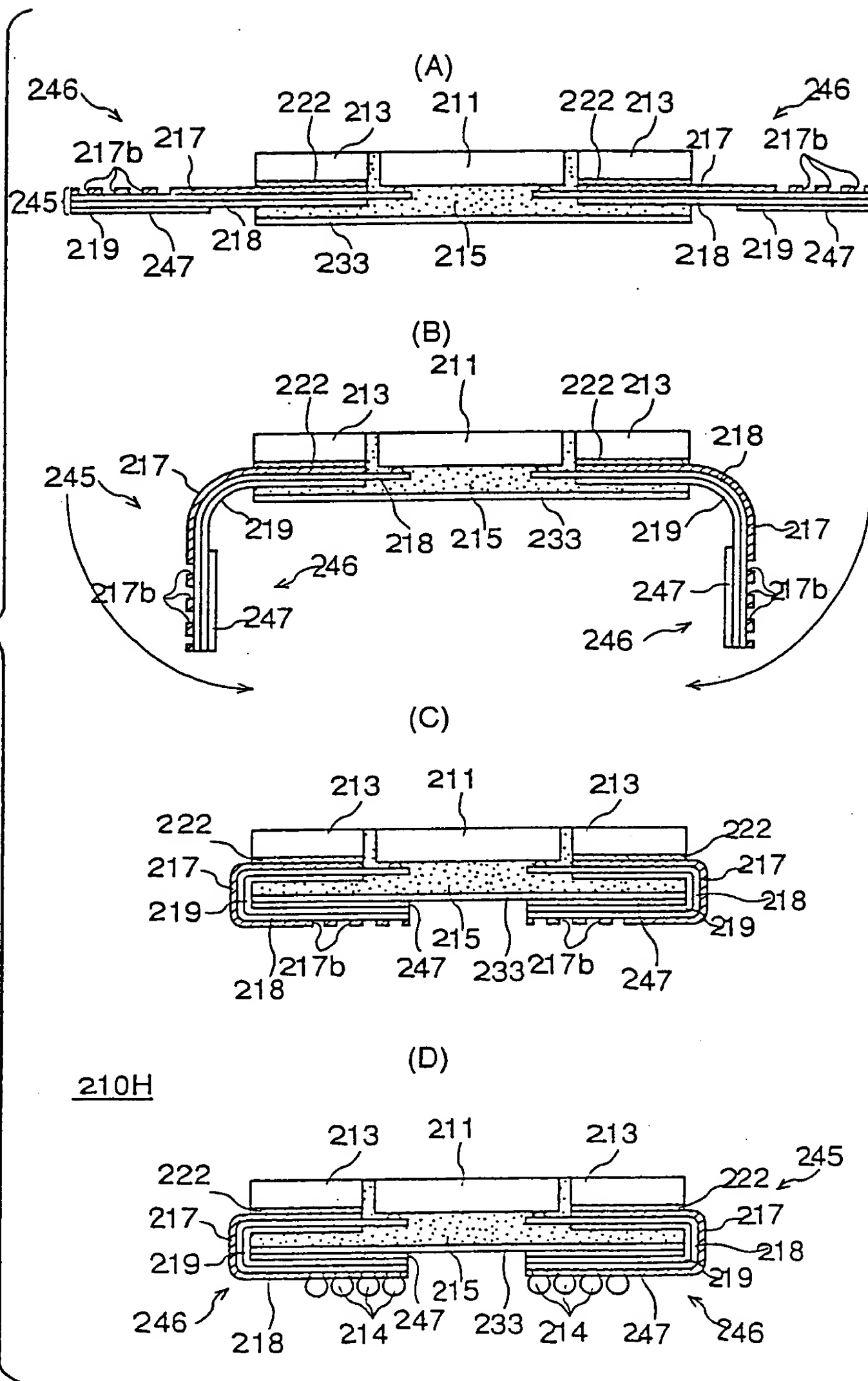
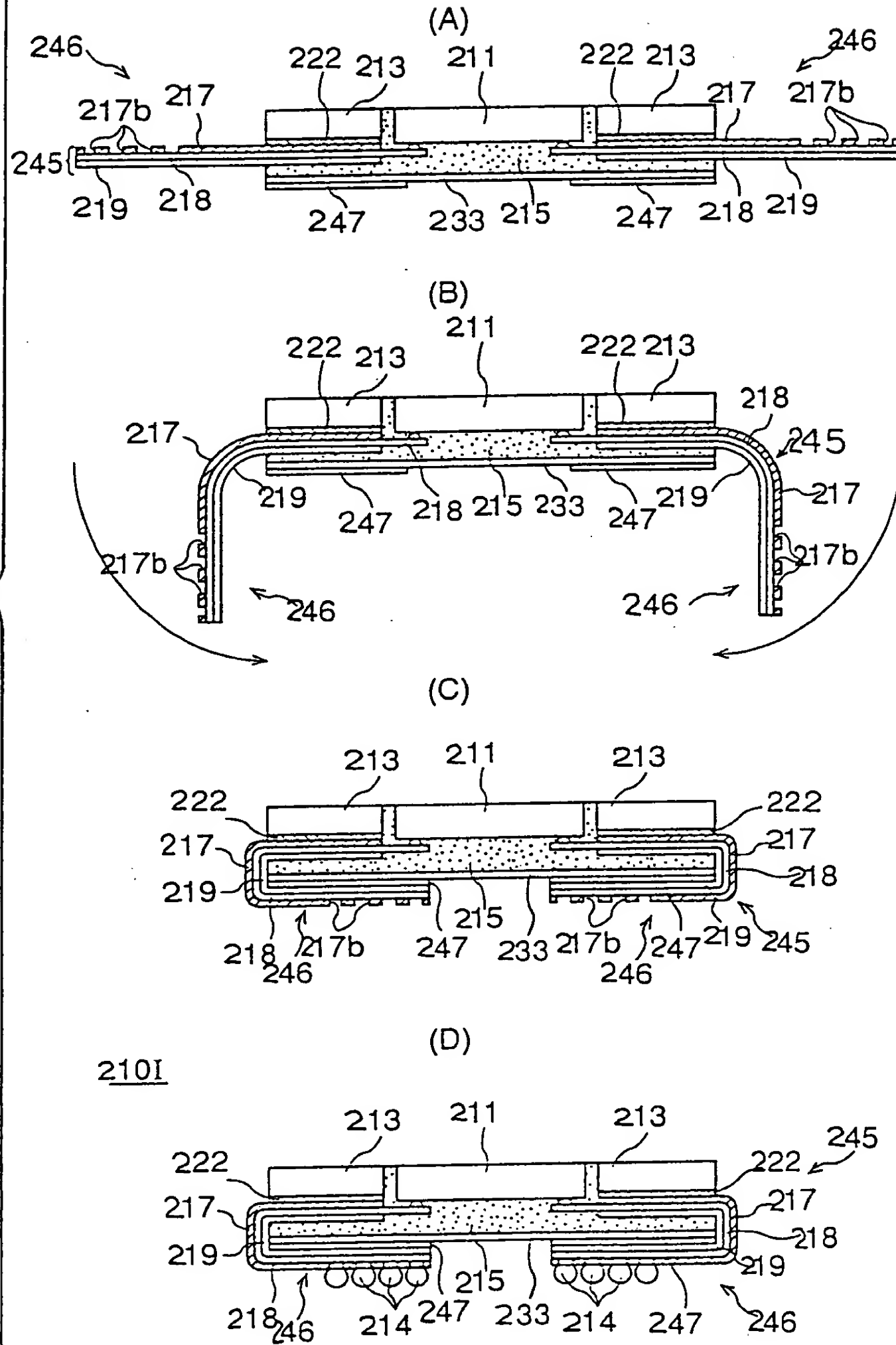




Fig. 94



**Fig. 95**

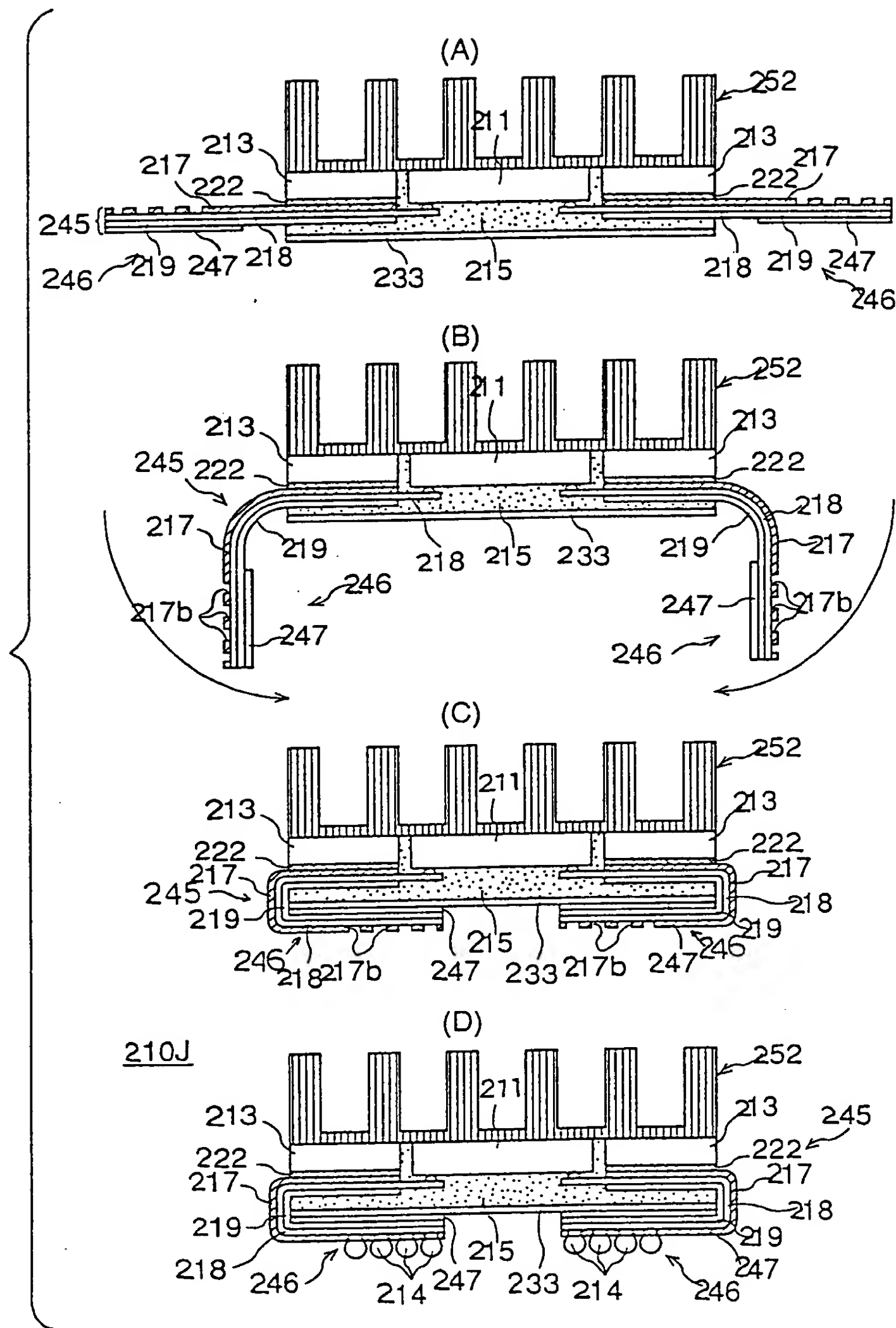


Fig. 96

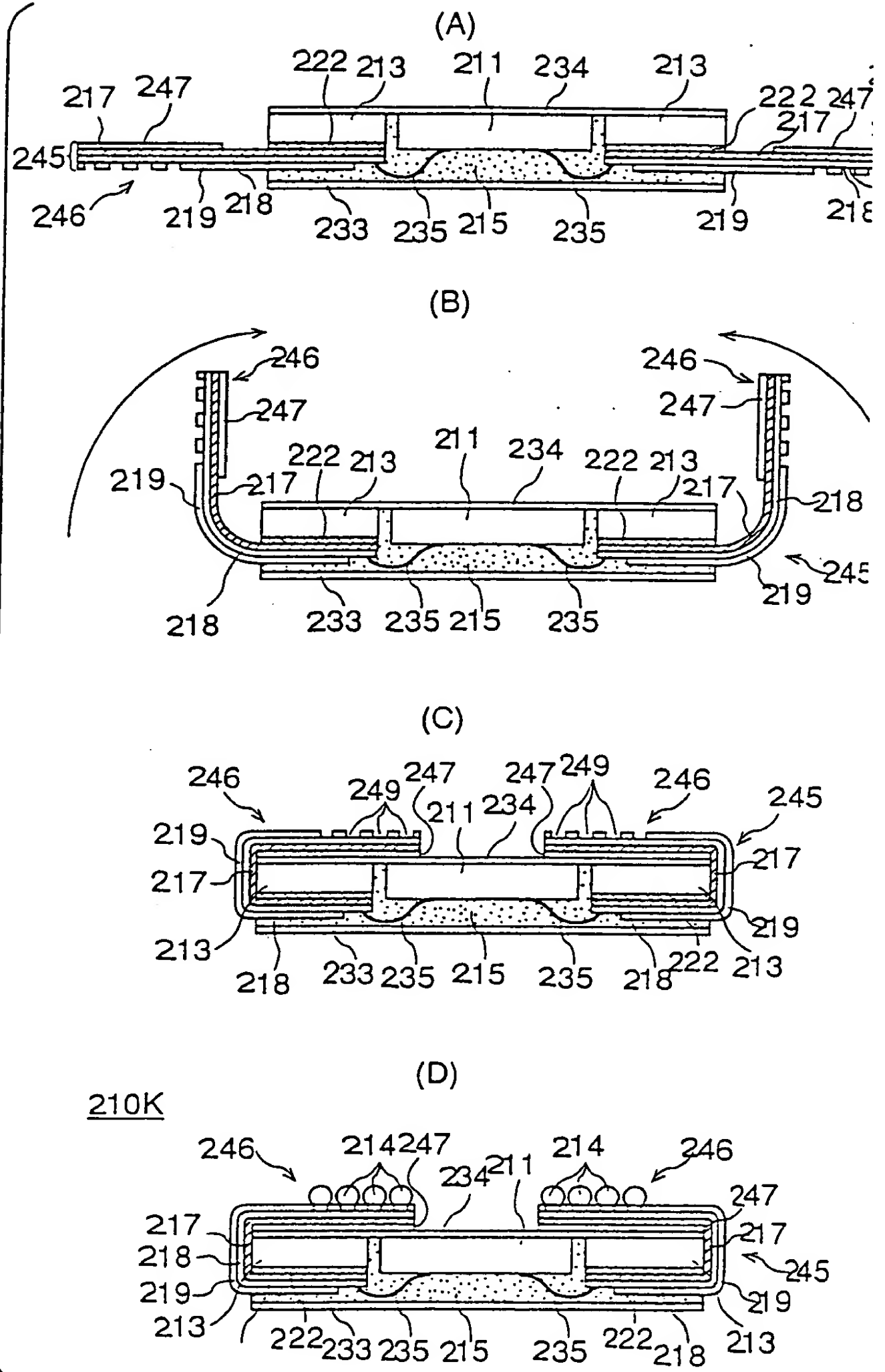


Fig. 97

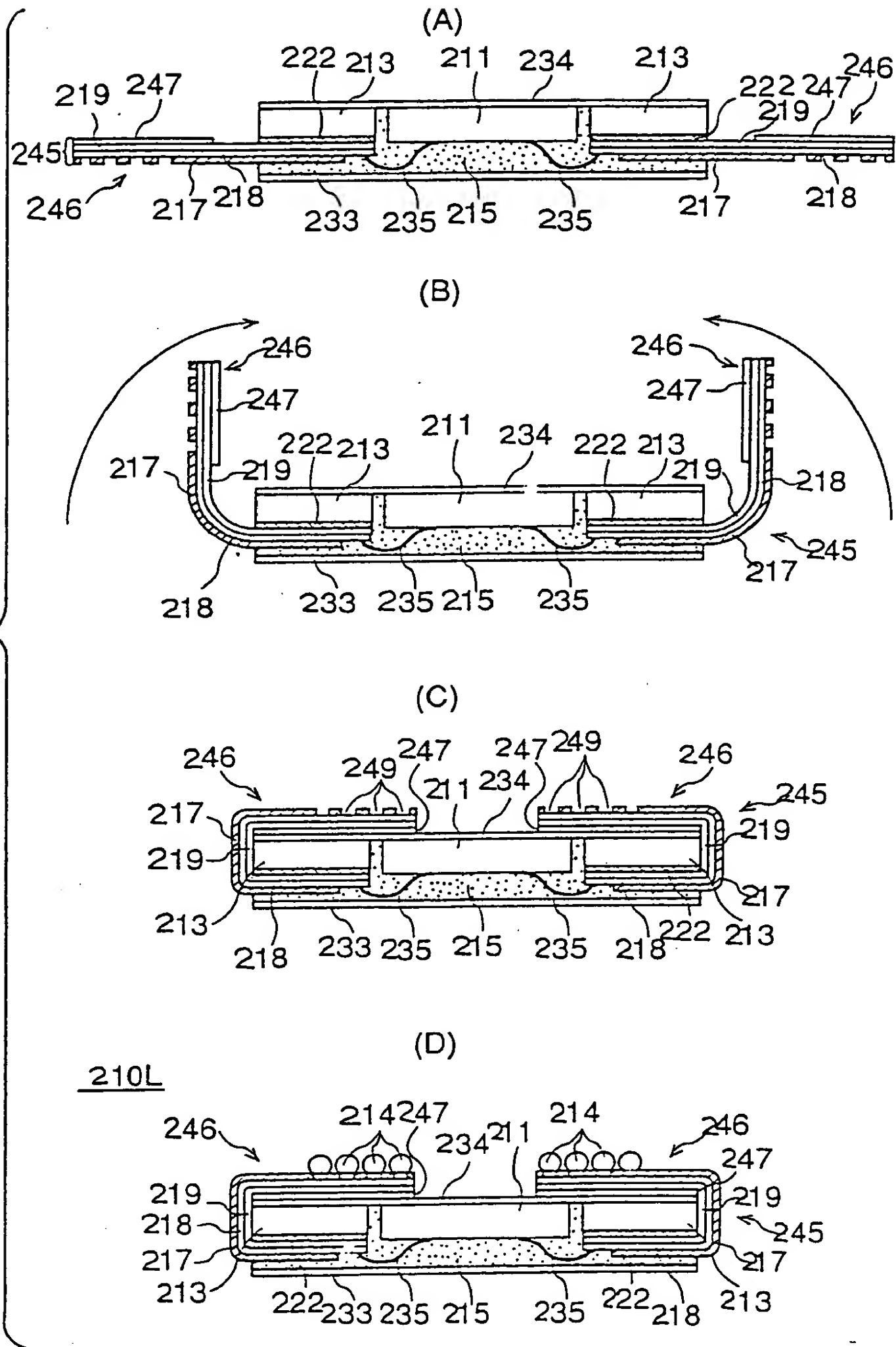


Fig. 98

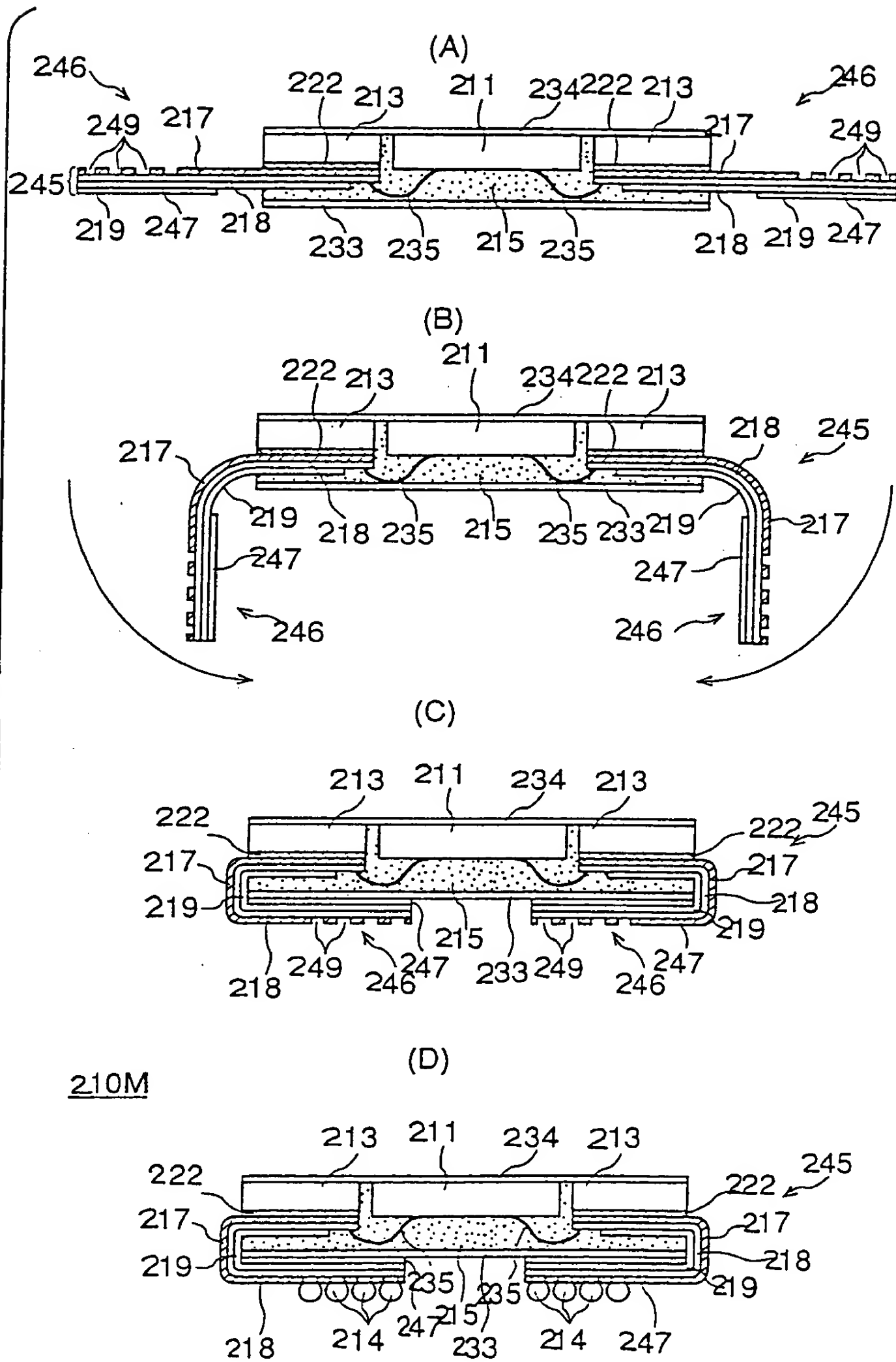
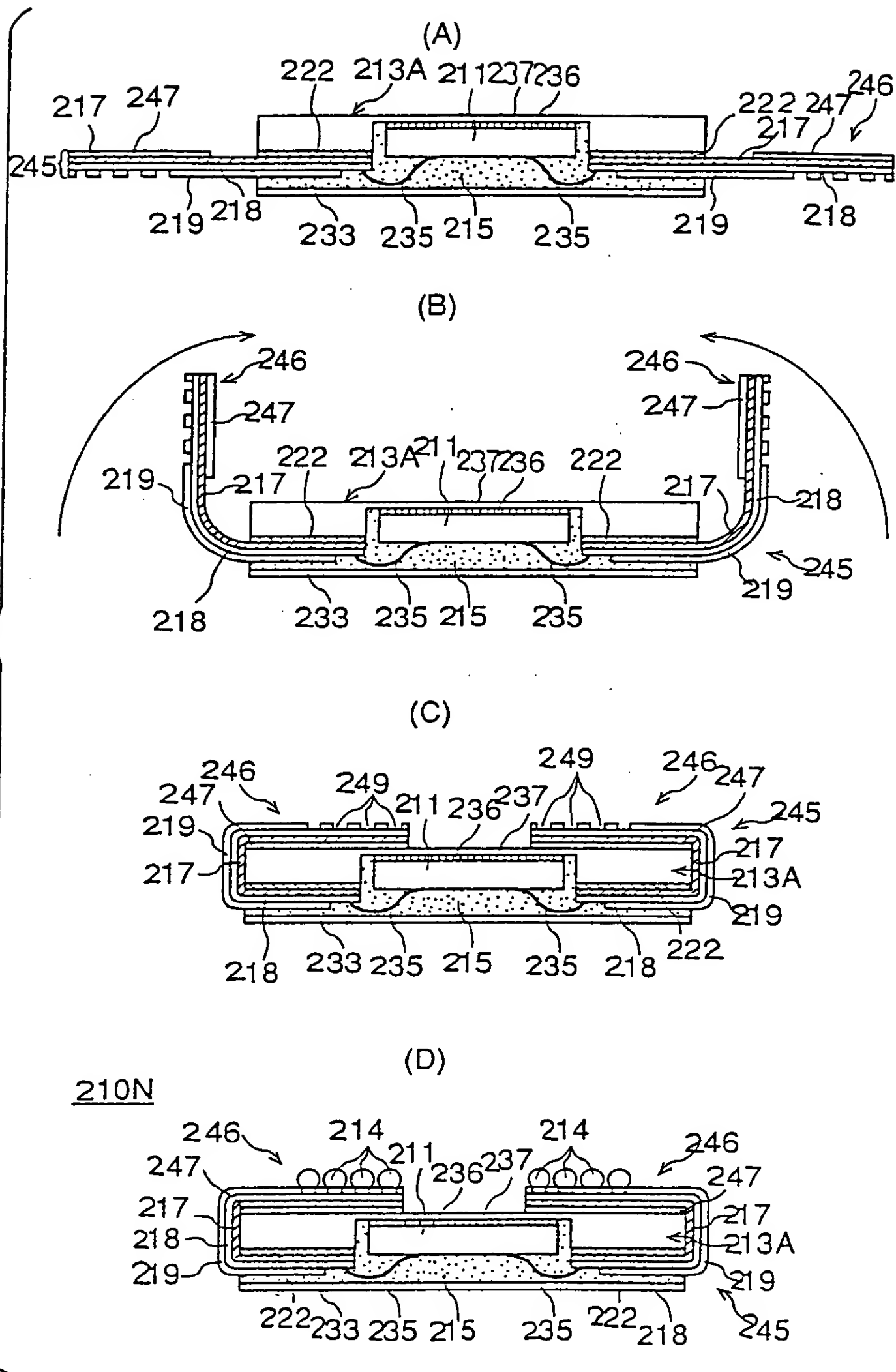


Fig. 99



097666-061901

Fig. 100

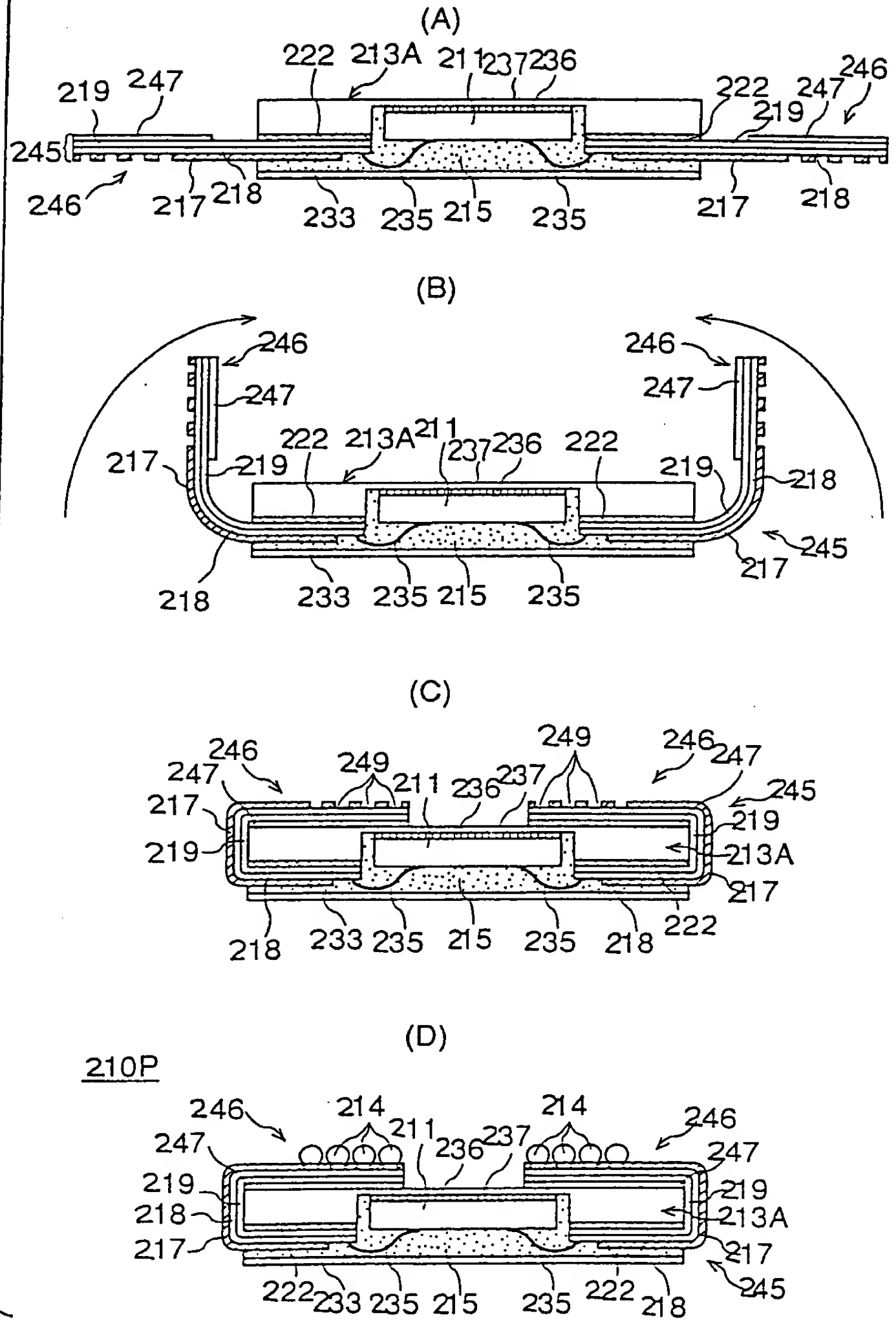


Fig. 101

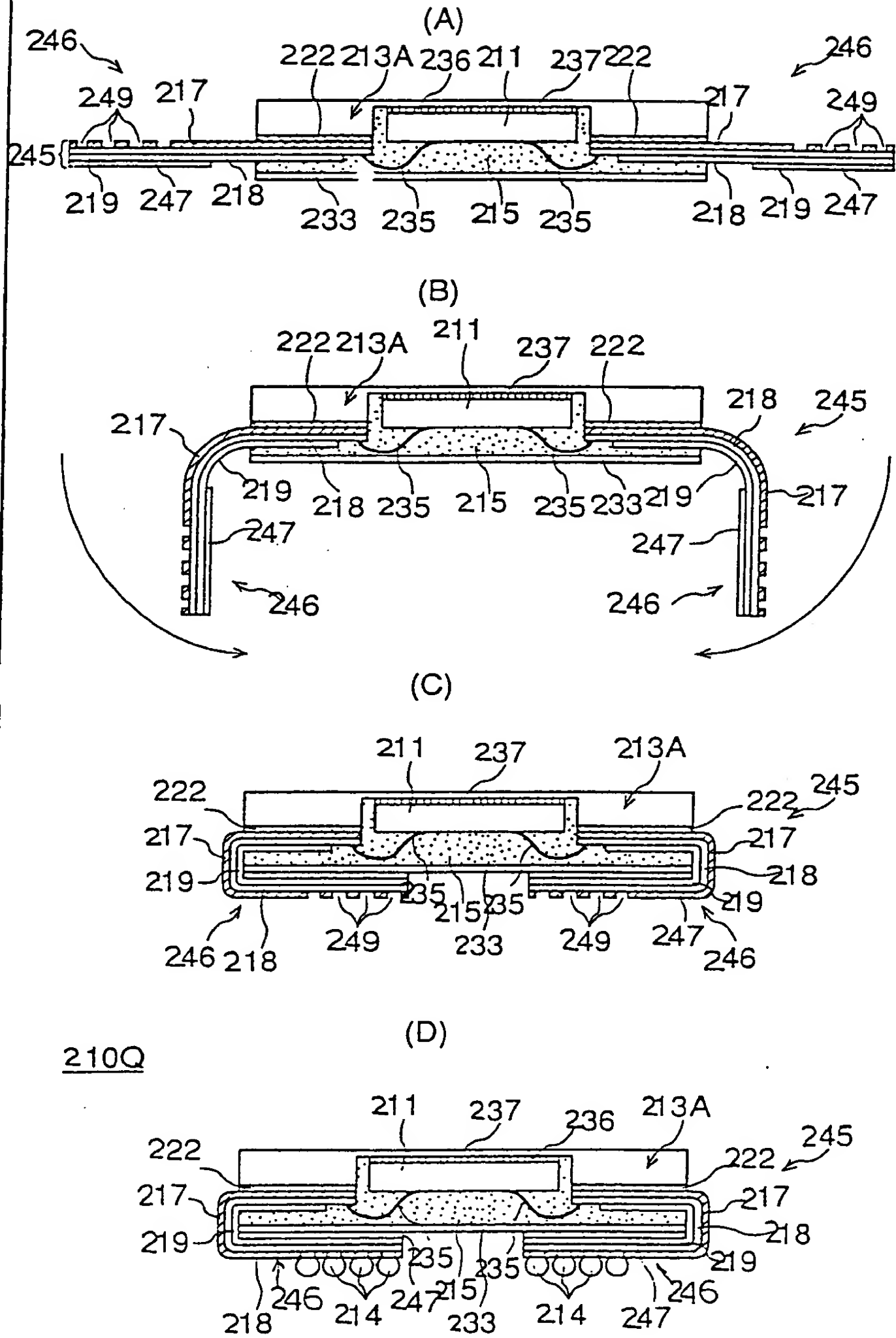




Fig. 102

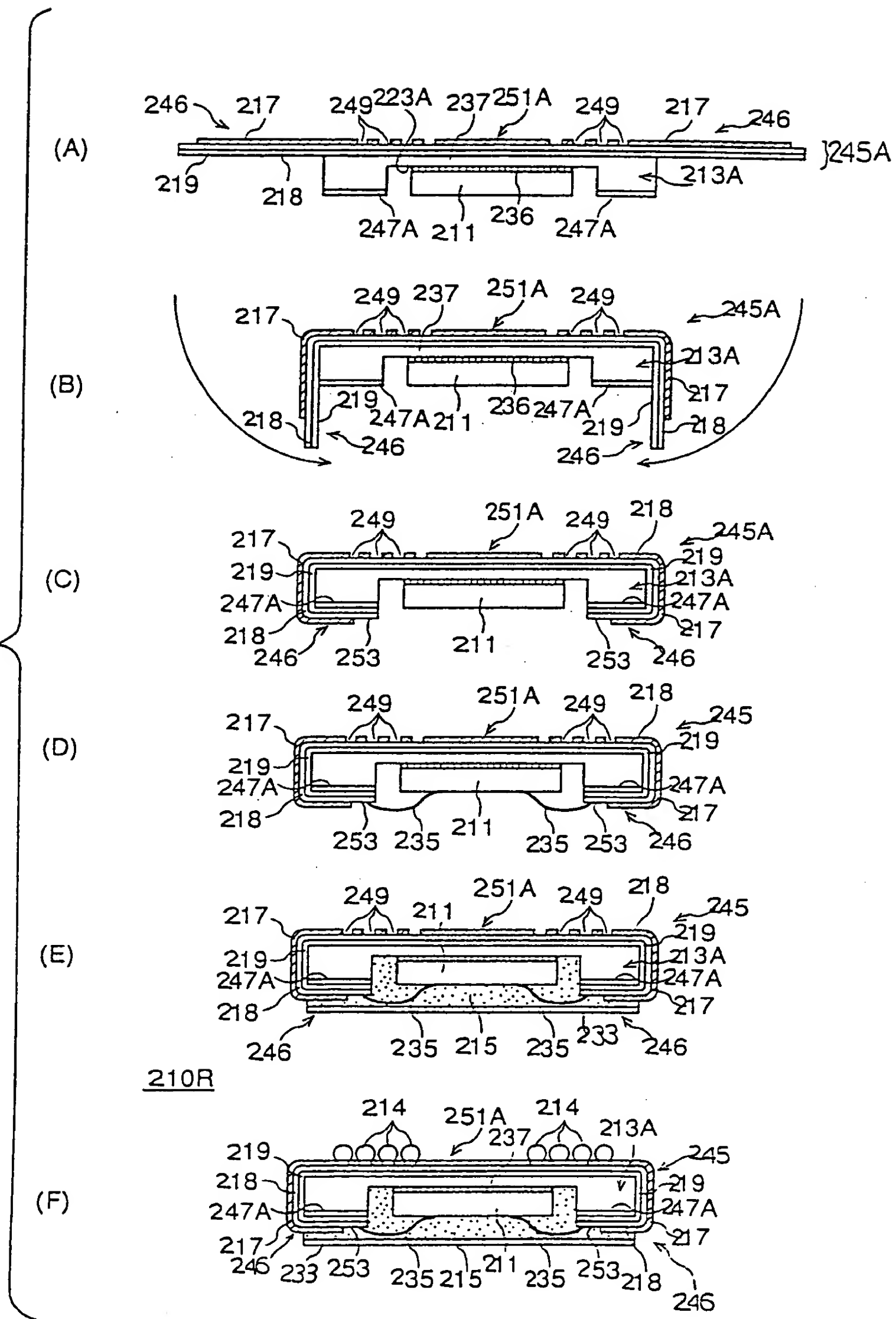
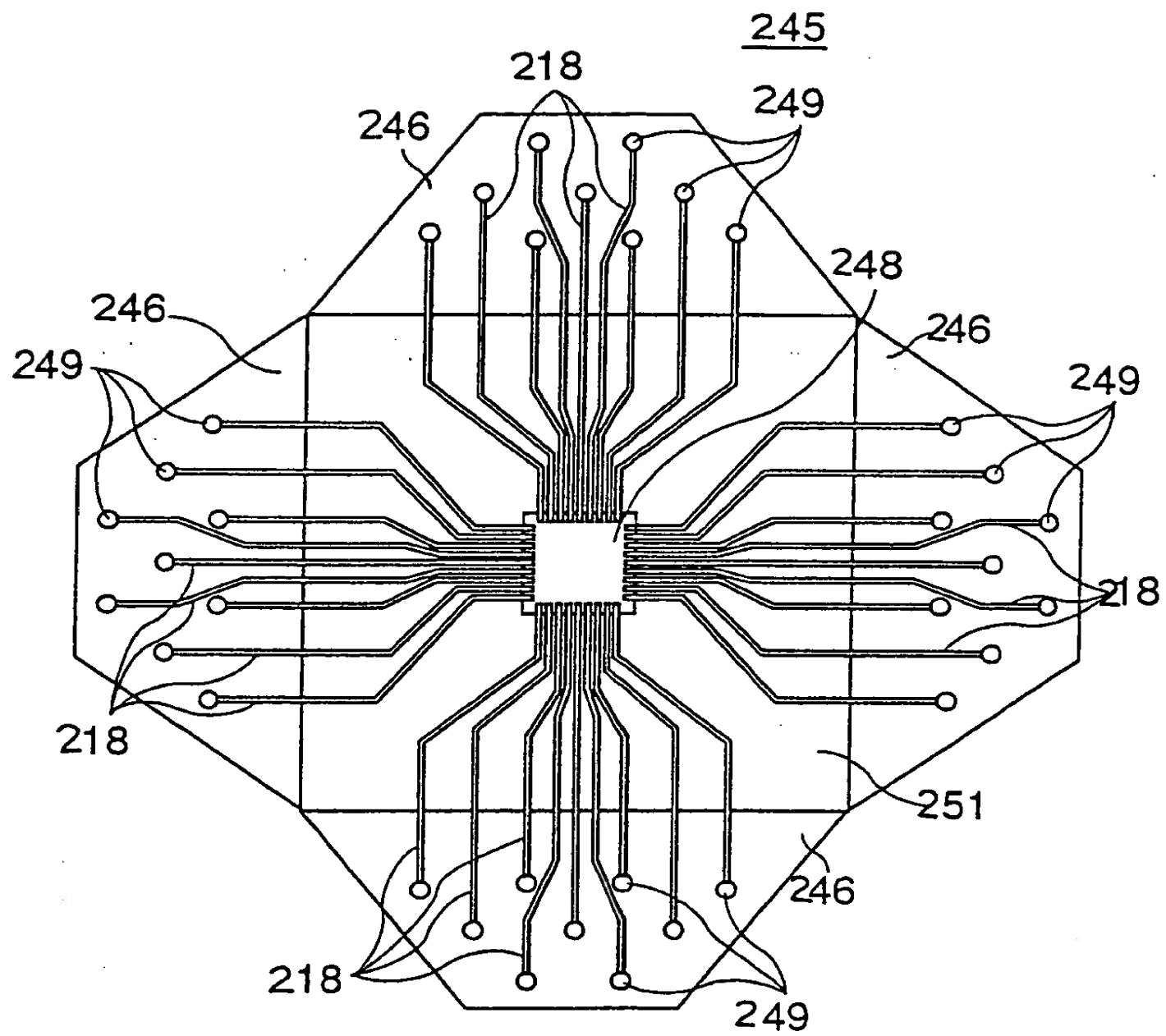


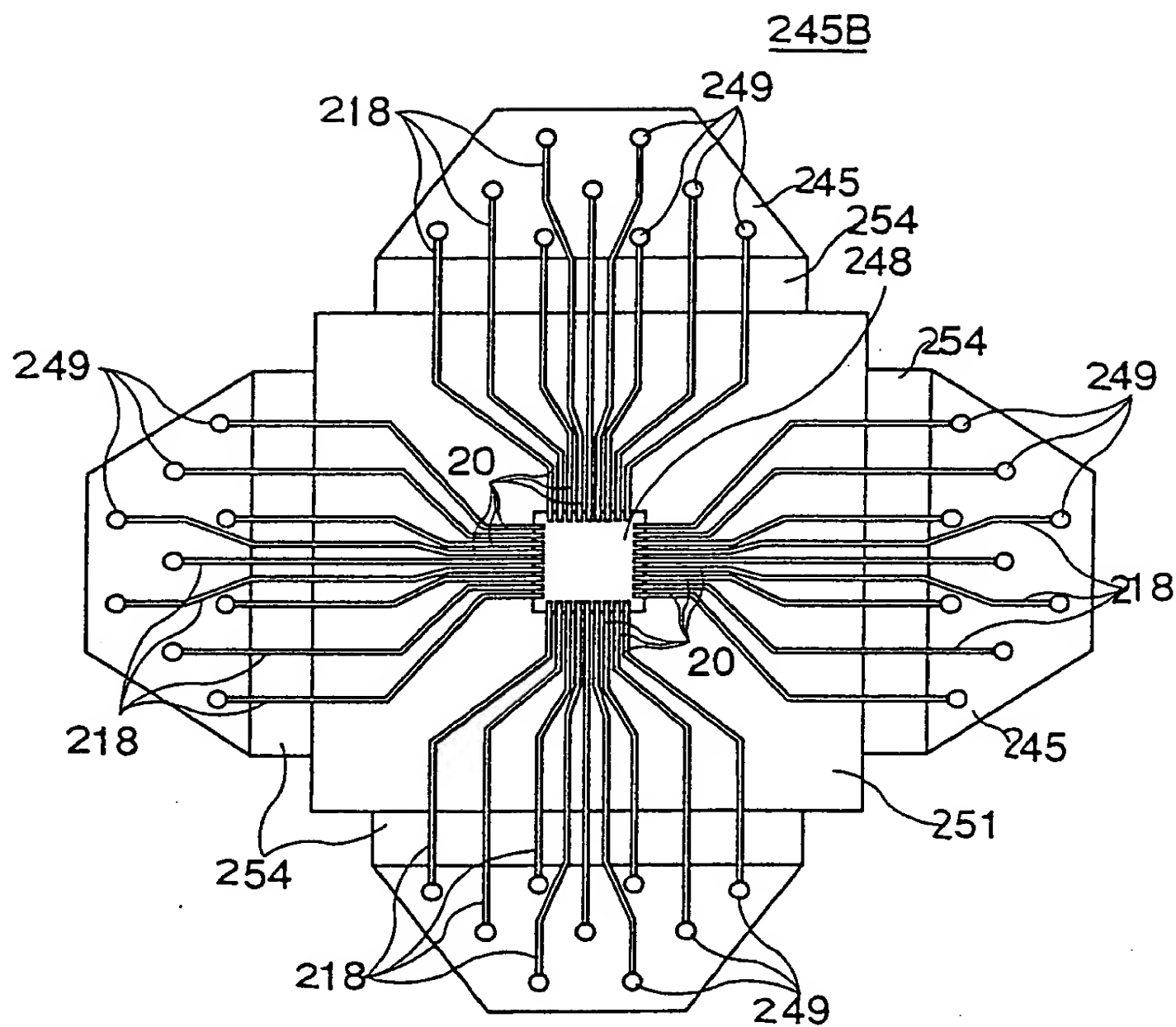
FIG. 103

Fig. 103



0976666 061901

Fig. 104



0976666-061901

Fig. 105

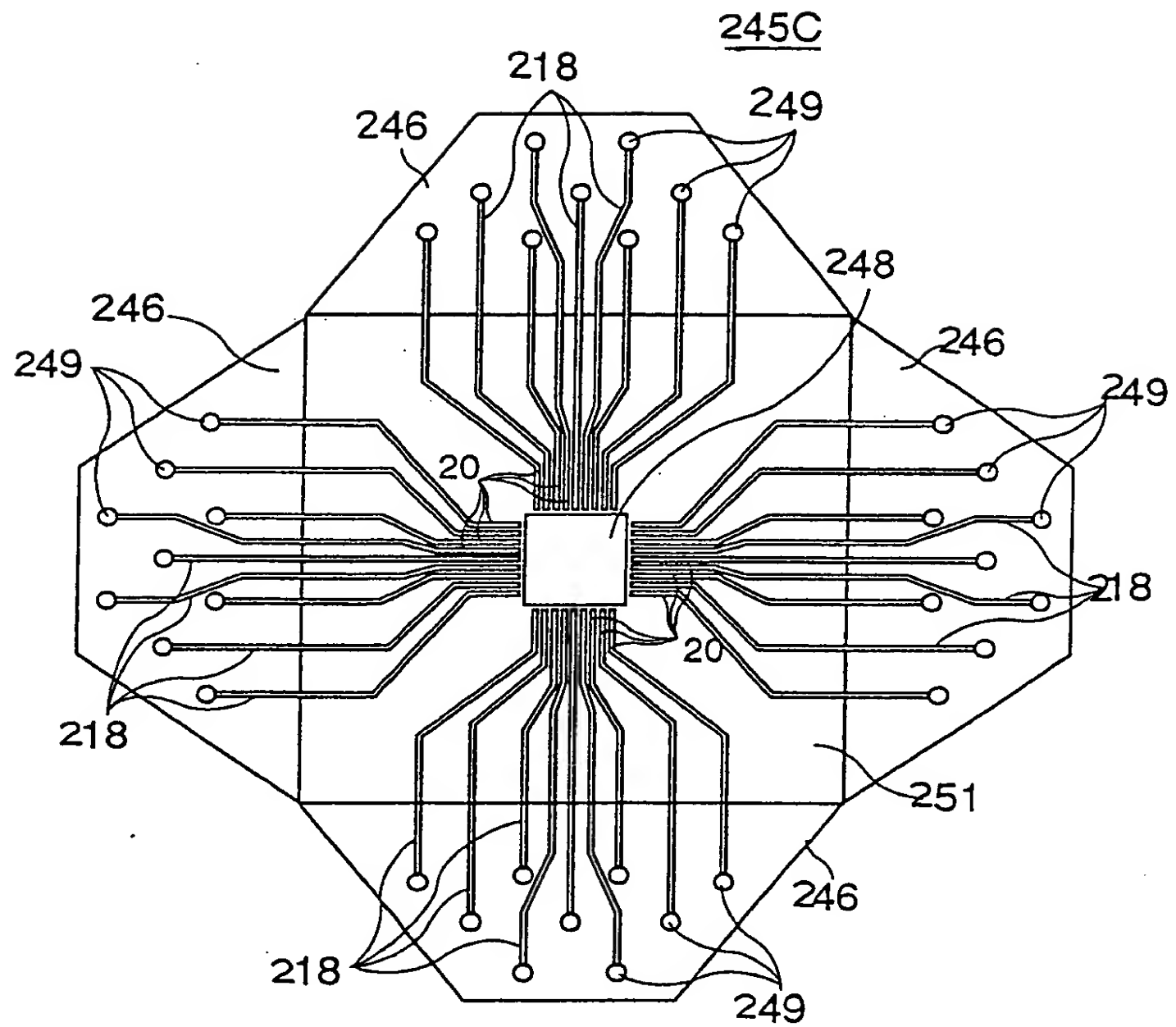


FIG. 106

Fig. 106

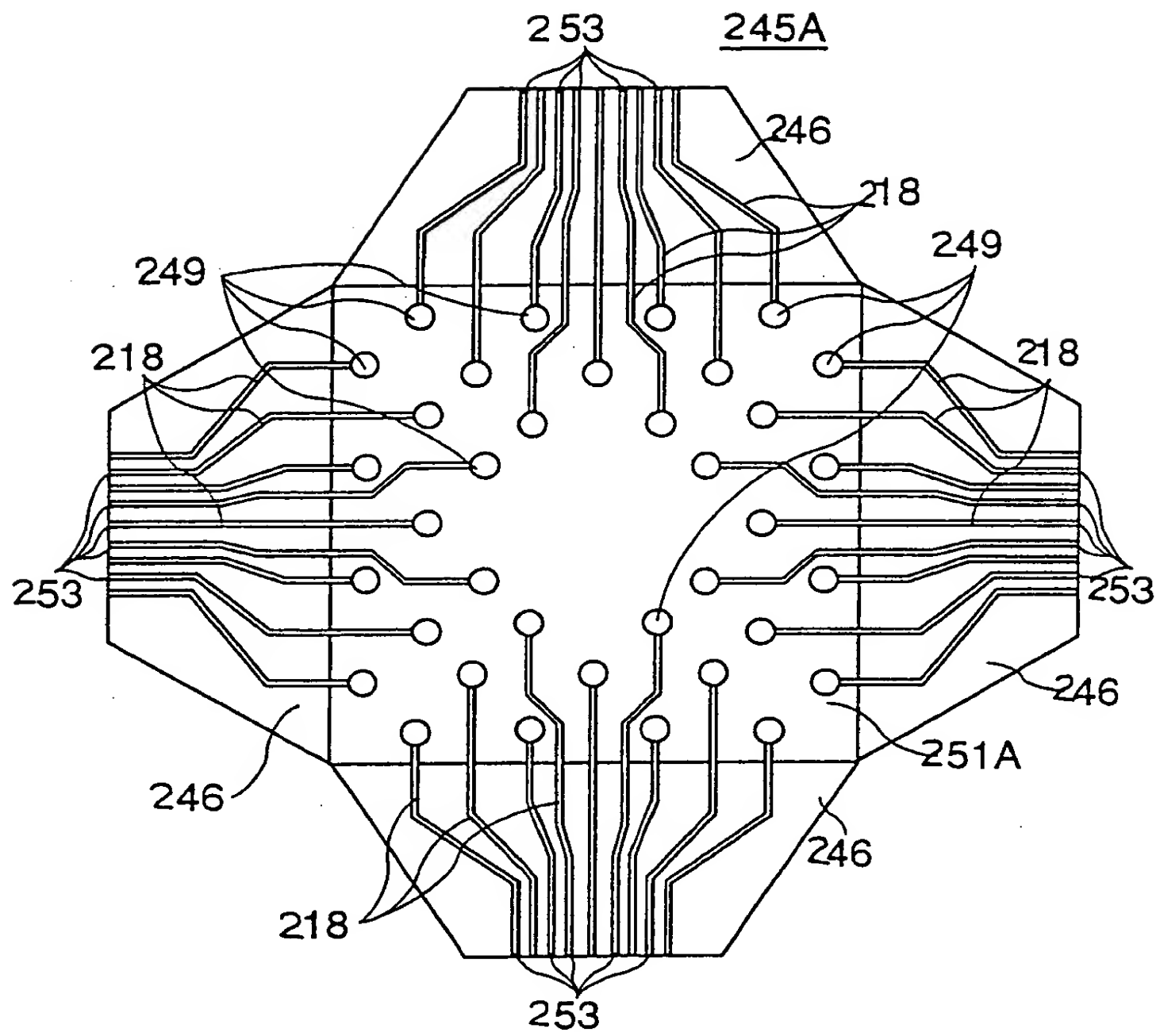


Fig. 107

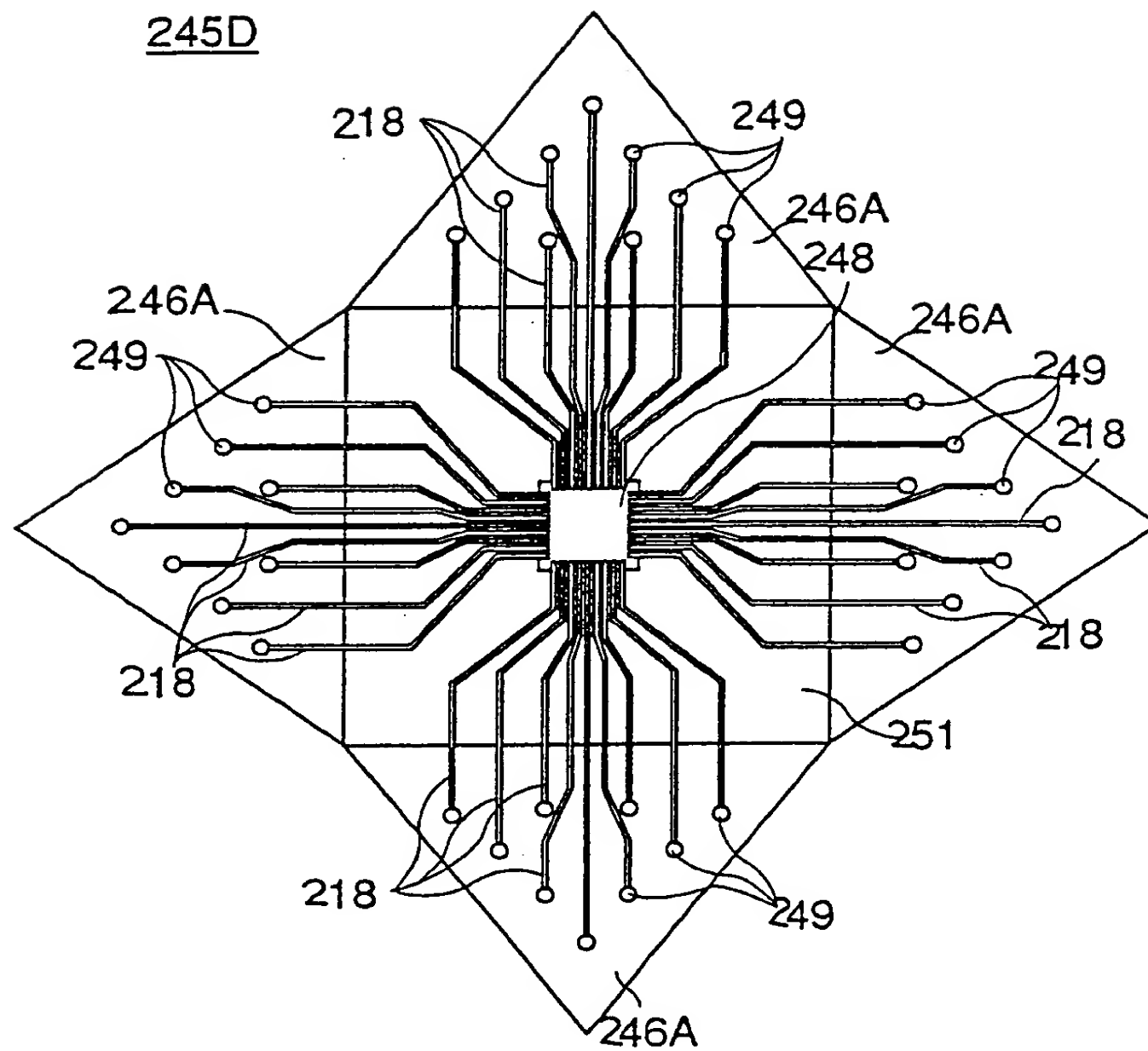


Fig. 108

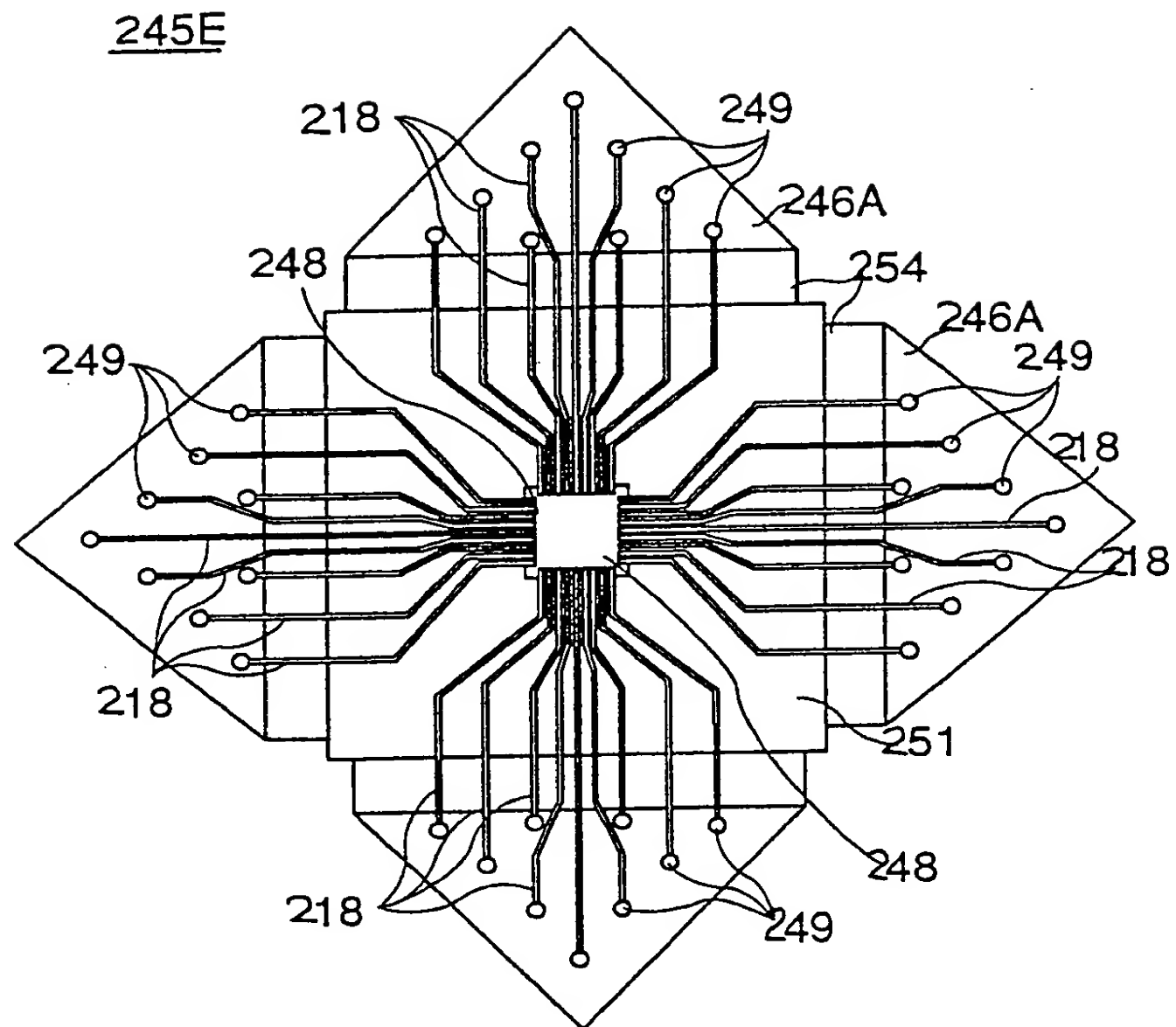


Fig. 109

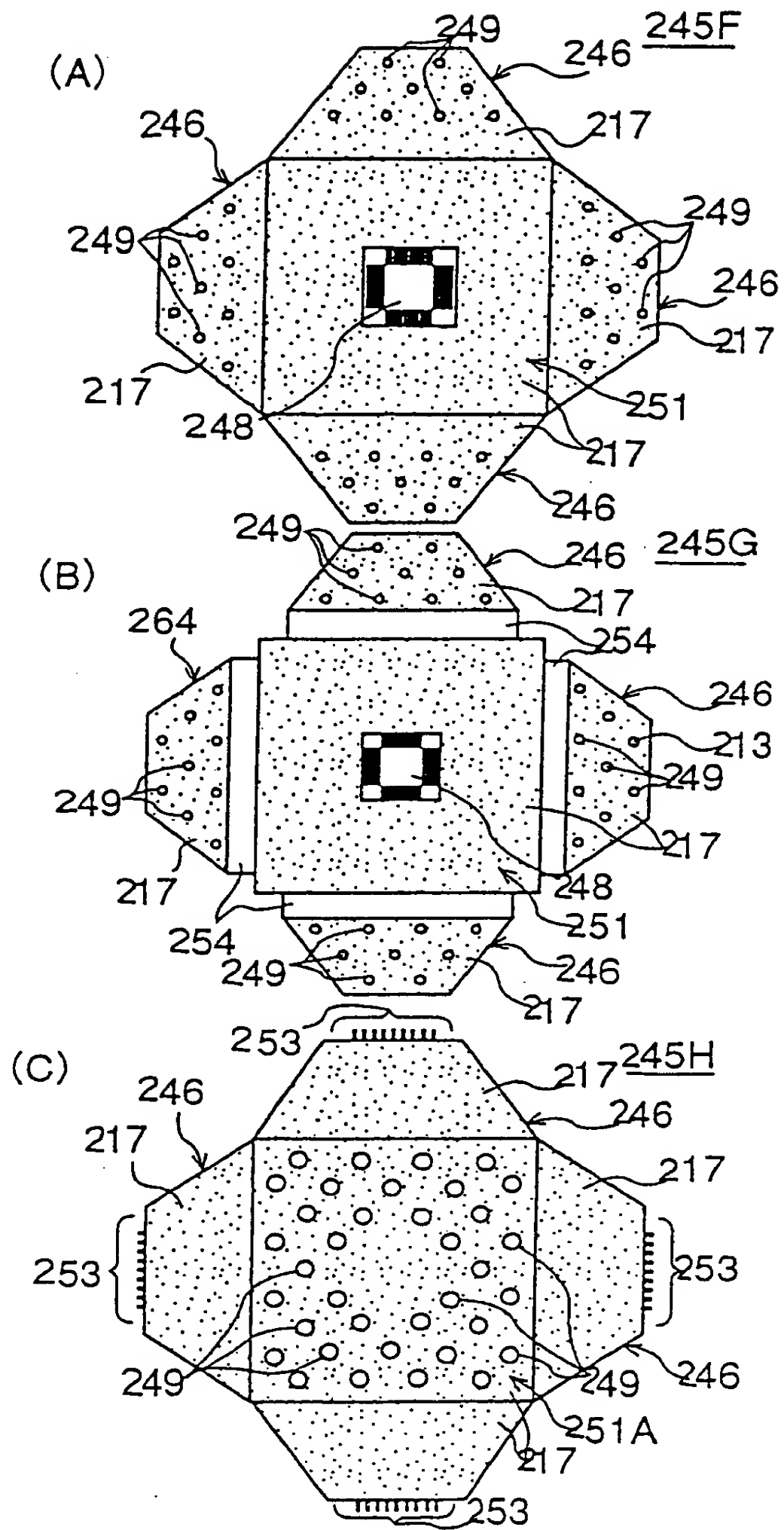
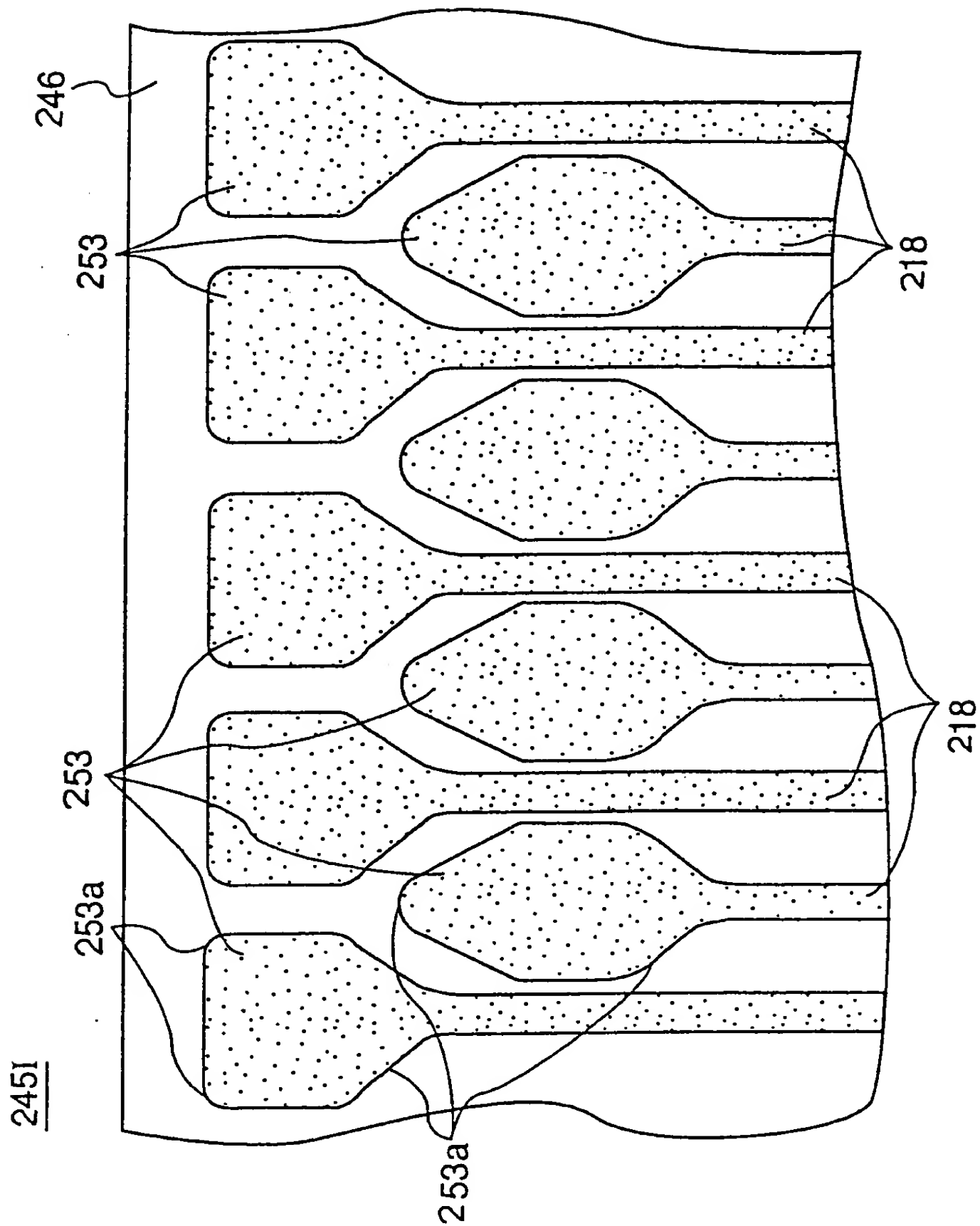


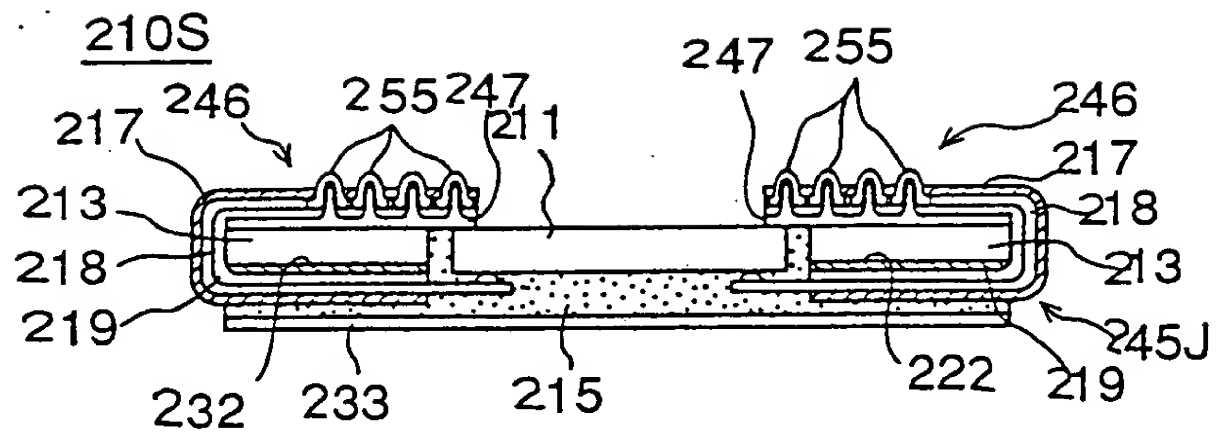


Fig. 110



0976666-061901  
FOR 999/60

Fig. 111



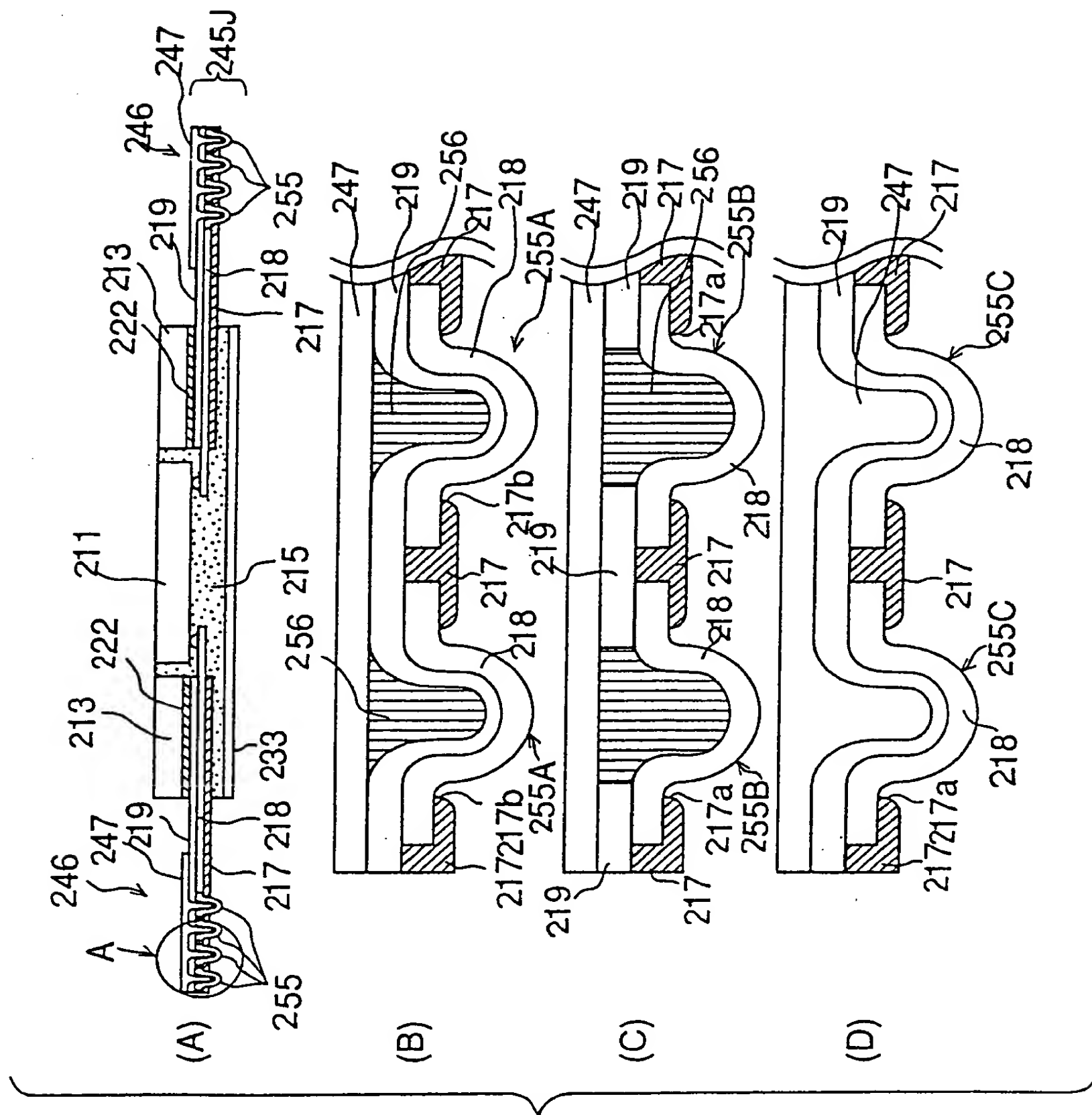


Fig. 112

| Parameter                   | Value            | Unit              |
|-----------------------------|------------------|-------------------|
| Temperature                 | 25               | °C                |
| Pressure                    | 1                | atm               |
| Time                        | 10               | min               |
| Concentration               | 0.1              | M                 |
| Volume                      | 10               | ml                |
| Flow rate                   | 1                | ml/min            |
| Wavelength                  | 254              | nm                |
| Path length                 | 1                | cm                |
| Refractive index            | 1.33             |                   |
| Viscosity                   | 0.01             | P                 |
| Density                     | 1.0              | g/cm <sup>3</sup> |
| Surface tension             | 72               | mN/m              |
| Electrical conductivity     | 0.1              | S/cm              |
| Dielectric constant         | 80               |                   |
| Thermal conductivity        | 0.6              | W/mK              |
| Heat capacity               | 4.2              | J/gK              |
| Enthalpy of fusion          | 10               | kJ/mol            |
| Enthalpy of vaporization    | 40               | kJ/mol            |
| Entropy of fusion           | 10               | J/molK            |
| Entropy of vaporization     | 100              | J/molK            |
| Free energy of fusion       | 10               | kJ/mol            |
| Free energy of vaporization | 40               | kJ/mol            |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           | 50               | kJ/mol            |
| Pre-exponential factor      | 10 <sup>12</sup> | mol/Ls            |
| Order of reaction           | 1                |                   |
| Half-life                   | 10               | min               |
| Stoichiometric coefficient  | 1                |                   |
| Equilibrium constant        | 1                |                   |
| Reaction rate               | 1                | mol/Ls            |
| Activation energy           |                  |                   |

**Fig. 113**

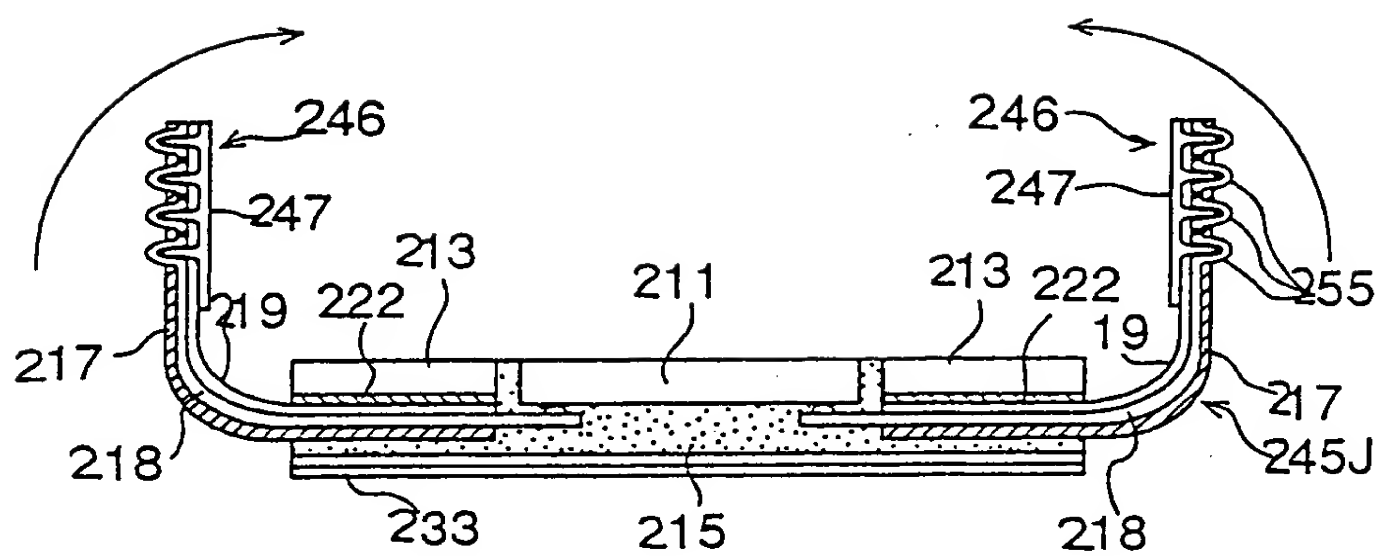


Fig. 114

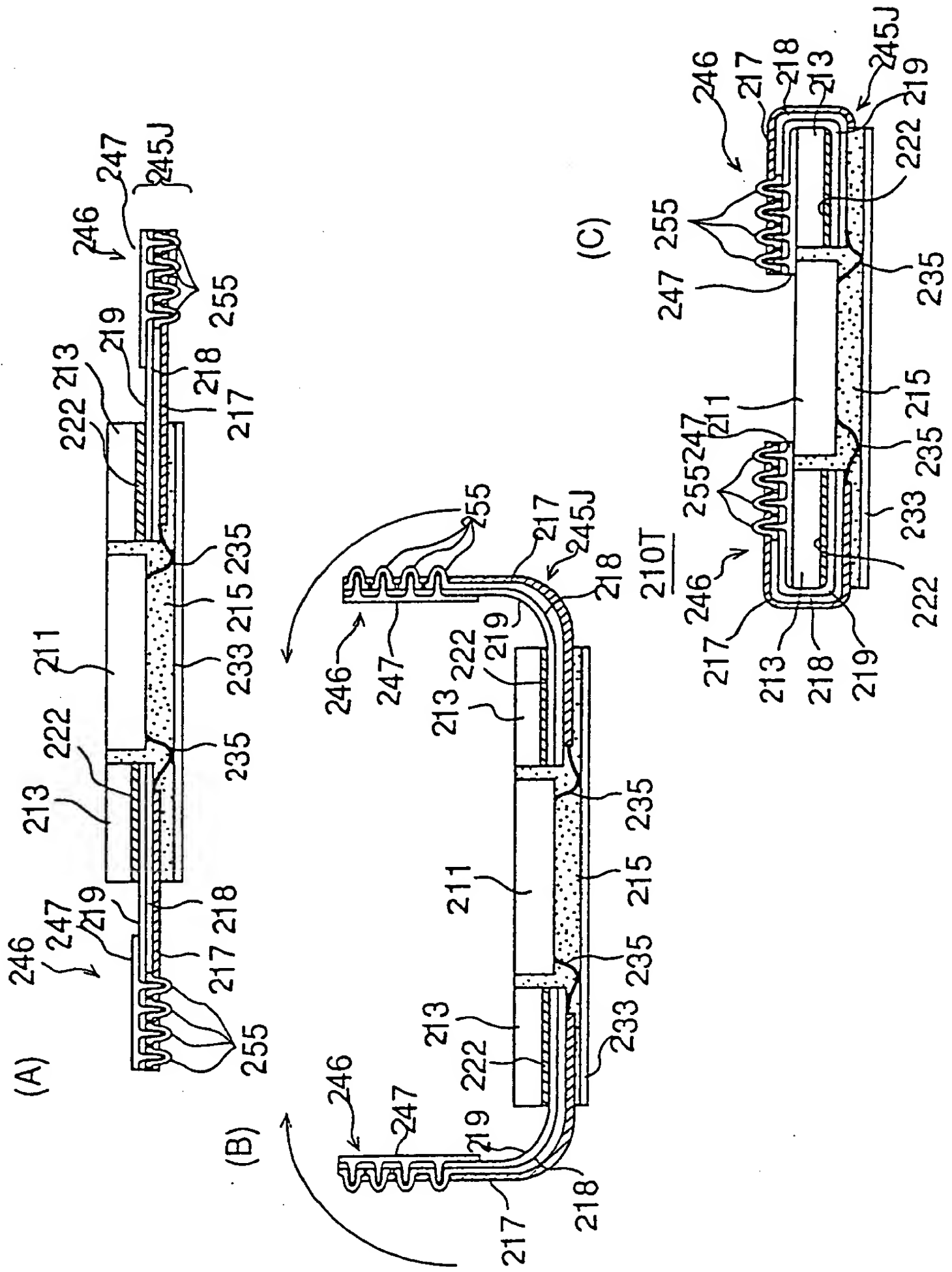


Fig. 115

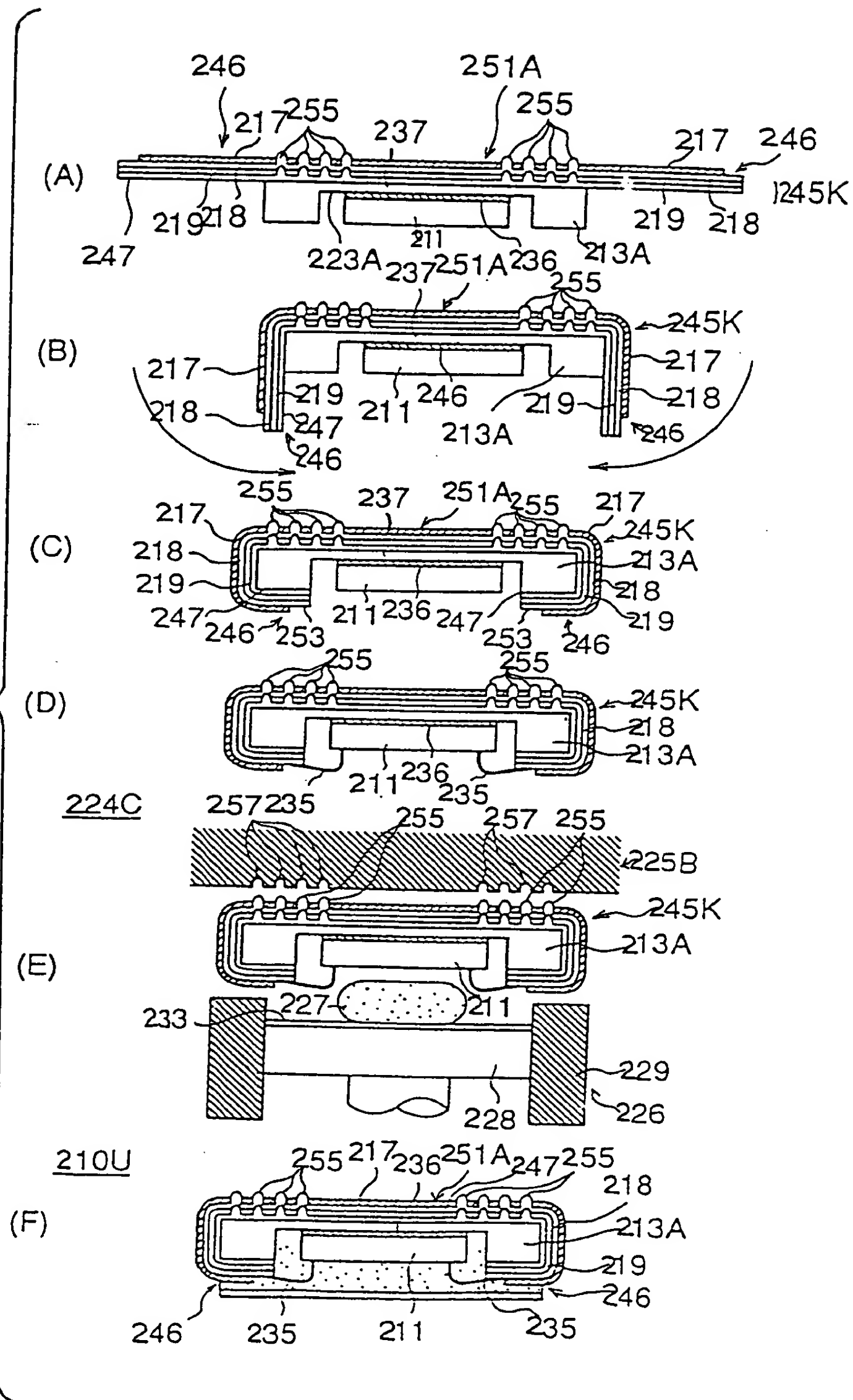


Fig. 116

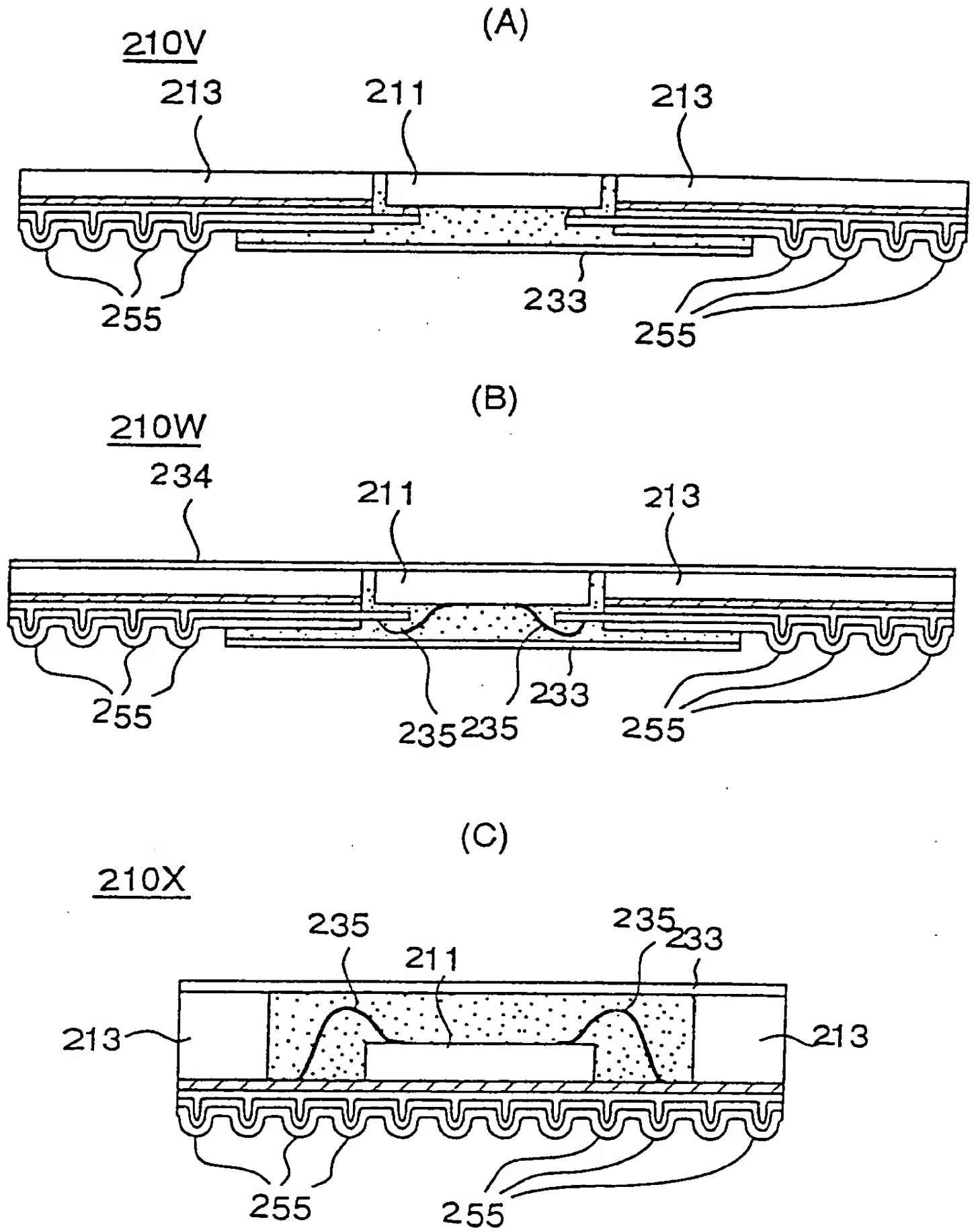
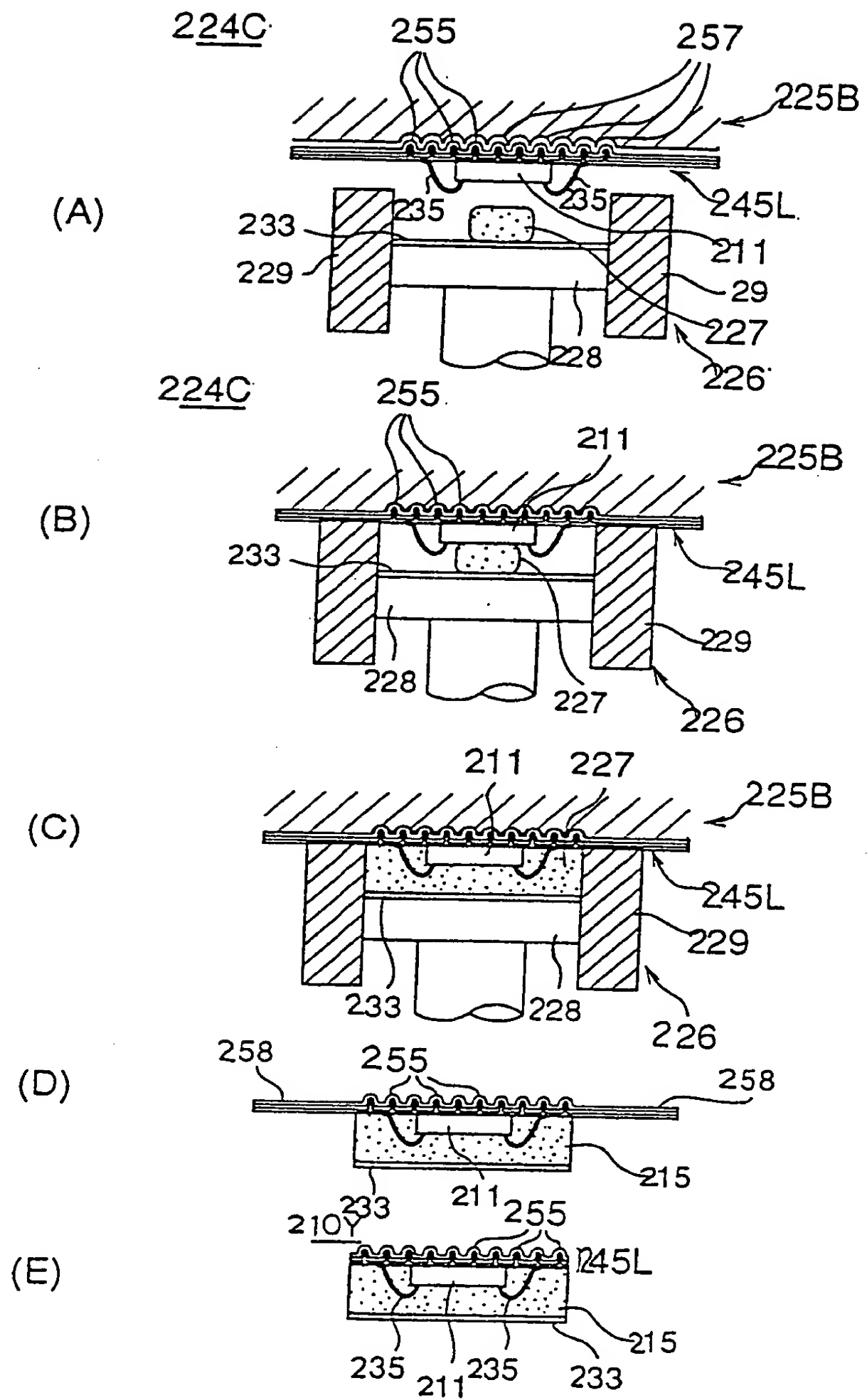
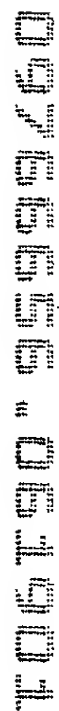


Fig. 117





| Parameter     | Unit  | Value |
|---------------|-------|-------|
| Temperature   | °C    | 25.0  |
| Pressure      | atm   | 1.0   |
| Flow rate     | L/min | 1.0   |
| Concentration | g/L   | 0.1   |
| pH            |       | 7.0   |
| Time          | min   | 10.0  |
| Volume        | L     | 1.0   |
| Mass          | g     | 0.1   |
| Energy        | J     | 10.0  |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
| Distance      | m     | 1.0   |
| Angle         | °     | 90.0  |
| Area          | m²    | 1.0   |
| Volume        | m³    | 1.0   |
| Mass          | kg    | 1.0   |
| Energy        | J     | 1.0   |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
| Distance      | m     | 1.0   |
| Angle         | °     | 90.0  |
| Area          | m²    | 1.0   |
| Volume        | m³    | 1.0   |
| Mass          | kg    | 1.0   |
| Energy        | J     | 1.0   |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
| Distance      | m     | 1.0   |
| Angle         | °     | 90.0  |
| Area          | m²    | 1.0   |
| Volume        | m³    | 1.0   |
| Mass          | kg    | 1.0   |
| Energy        | J     | 1.0   |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
| Distance      | m     | 1.0   |
| Angle         | °     | 90.0  |
| Area          | m²    | 1.0   |
| Volume        | m³    | 1.0   |
| Mass          | kg    | 1.0   |
| Energy        | J     | 1.0   |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
| Distance      | m     | 1.0   |
| Angle         | °     | 90.0  |
| Area          | m²    | 1.0   |
| Volume        | m³    | 1.0   |
| Mass          | kg    | 1.0   |
| Energy        | J     | 1.0   |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
| Distance      | m     | 1.0   |
| Angle         | °     | 90.0  |
| Area          | m²    | 1.0   |
| Volume        | m³    | 1.0   |
| Mass          | kg    | 1.0   |
| Energy        | J     | 1.0   |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
| Distance      | m     | 1.0   |
| Angle         | °     | 90.0  |
| Area          | m²    | 1.0   |
| Volume        | m³    | 1.0   |
| Mass          | kg    | 1.0   |
| Energy        | J     | 1.0   |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
| Distance      | m     | 1.0   |
| Angle         | °     | 90.0  |
| Area          | m²    | 1.0   |
| Volume        | m³    | 1.0   |
| Mass          | kg    | 1.0   |
| Energy        | J     | 1.0   |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
| Distance      | m     | 1.0   |
| Angle         | °     | 90.0  |
| Area          | m²    | 1.0   |
| Volume        | m³    | 1.0   |
| Mass          | kg    | 1.0   |
| Energy        | J     | 1.0   |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
| Distance      | m     | 1.0   |
| Angle         | °     | 90.0  |
| Area          | m²    | 1.0   |
| Volume        | m³    | 1.0   |
| Mass          | kg    | 1.0   |
| Energy        | J     | 1.0   |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
| Distance      | m     | 1.0   |
| Angle         | °     | 90.0  |
| Area          | m²    | 1.0   |
| Volume        | m³    | 1.0   |
| Mass          | kg    | 1.0   |
| Energy        | J     | 1.0   |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
| Distance      | m     | 1.0   |
| Angle         | °     | 90.0  |
| Area          | m²    | 1.0   |
| Volume        | m³    | 1.0   |
| Mass          | kg    | 1.0   |
| Energy        | J     | 1.0   |
| Power         | W     | 1.0   |
| Frequency     | Hz    | 1.0   |
| Wavelength    | nm    | 400.0 |
| Intensity     | W/m²  | 1.0   |
|               |       |       |



1 0 5 / 1 3 1

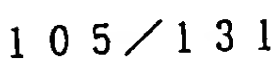


Fig. 119

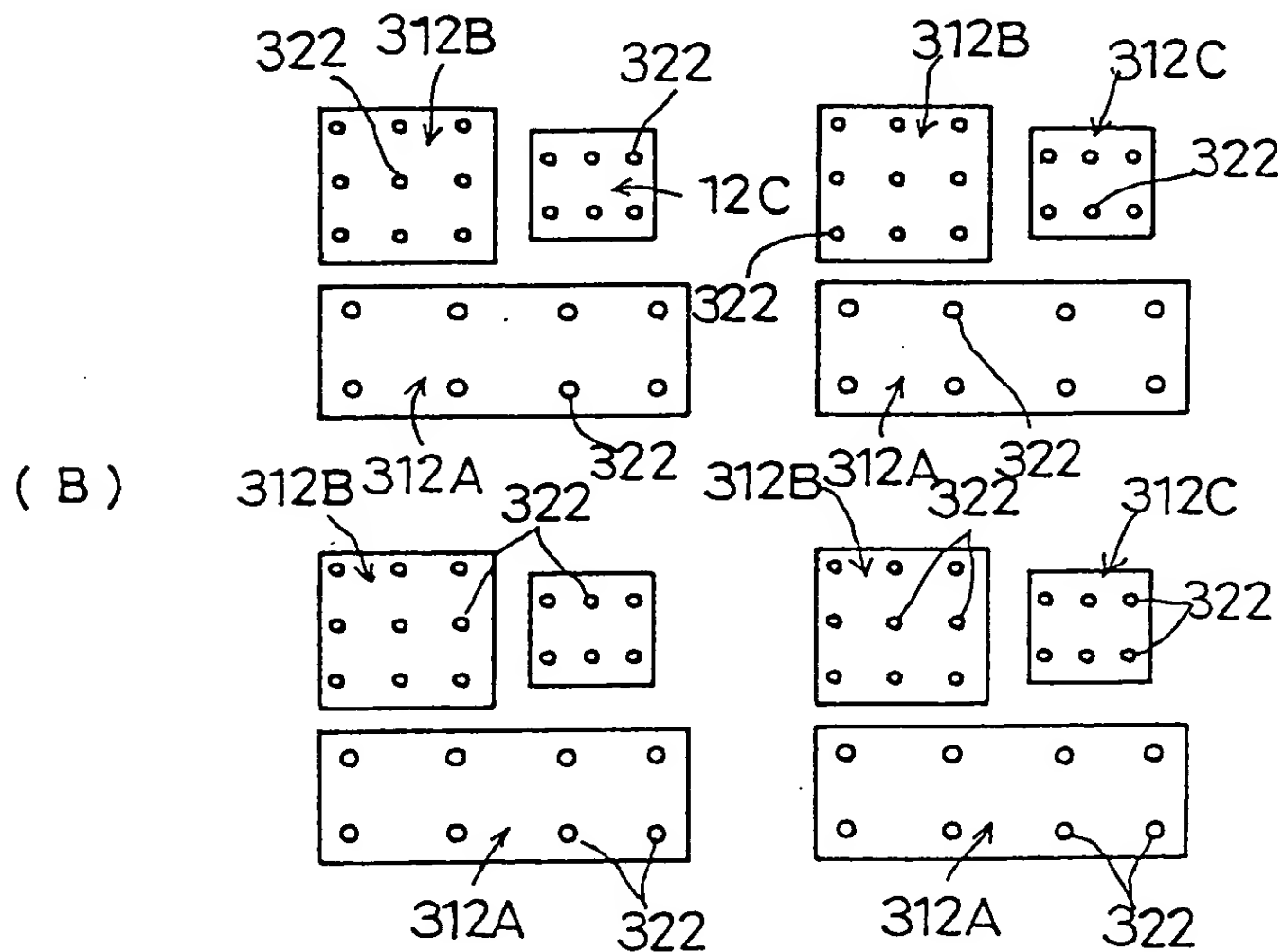
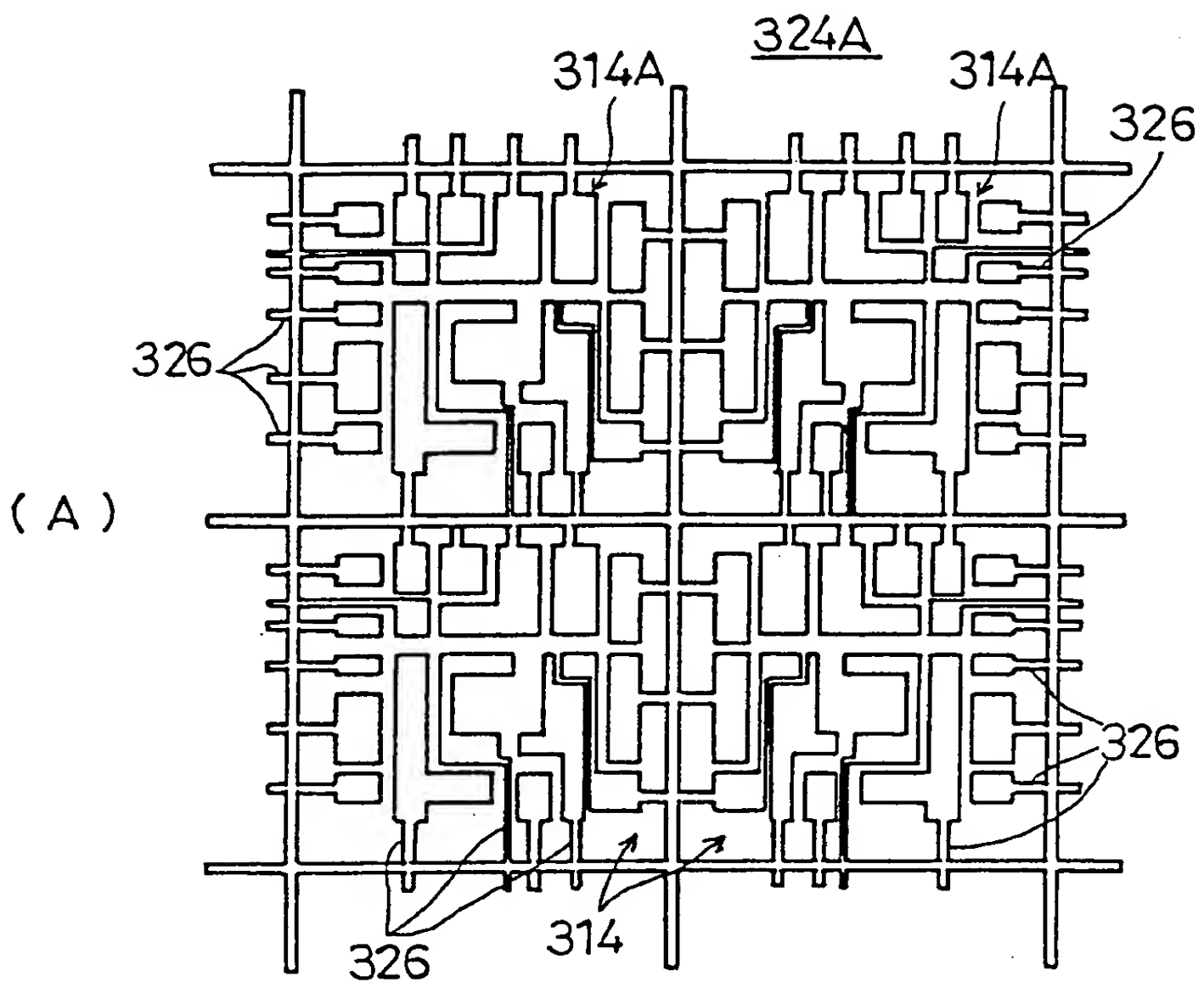


Fig. 121

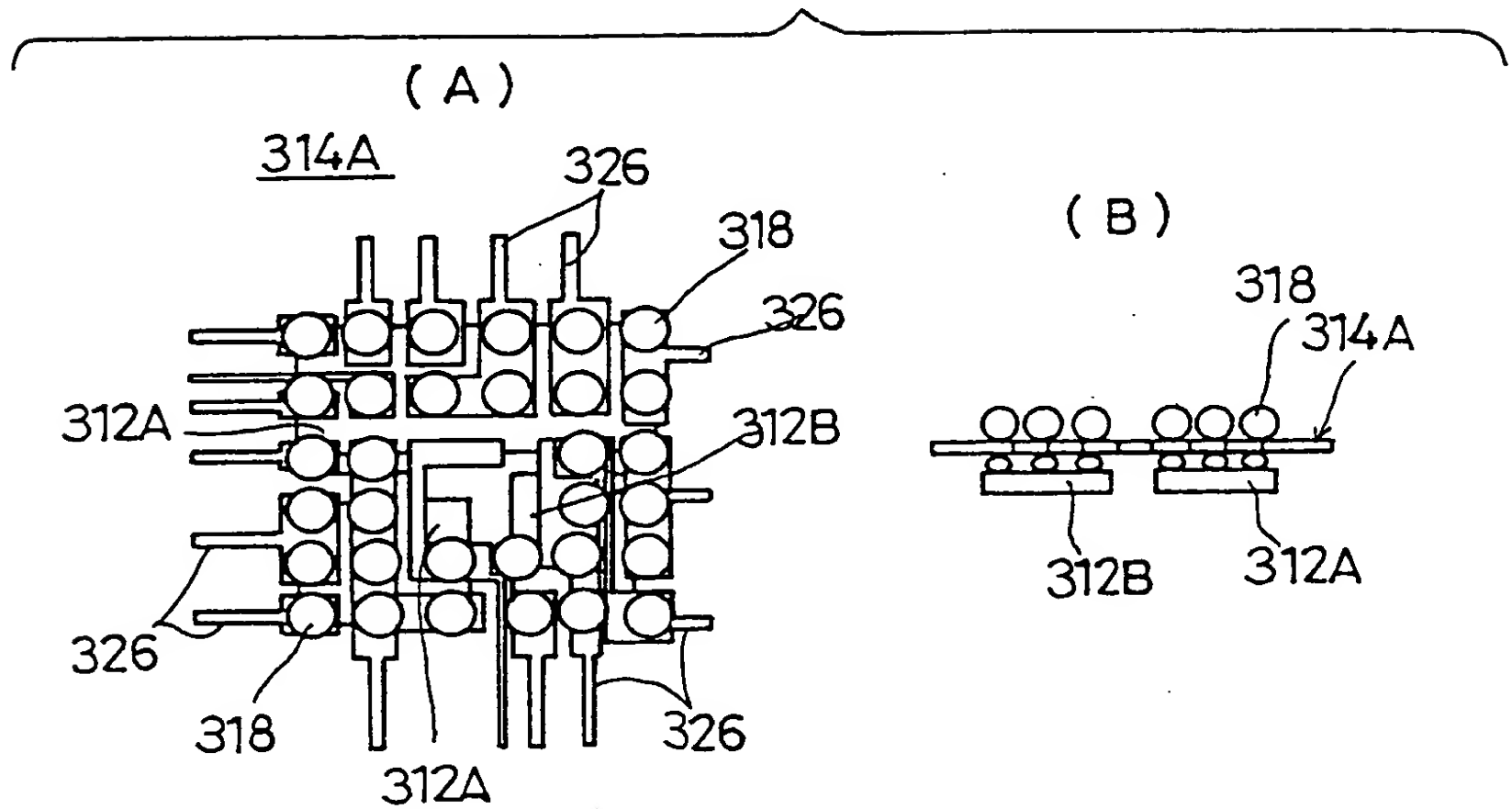


Fig. 122

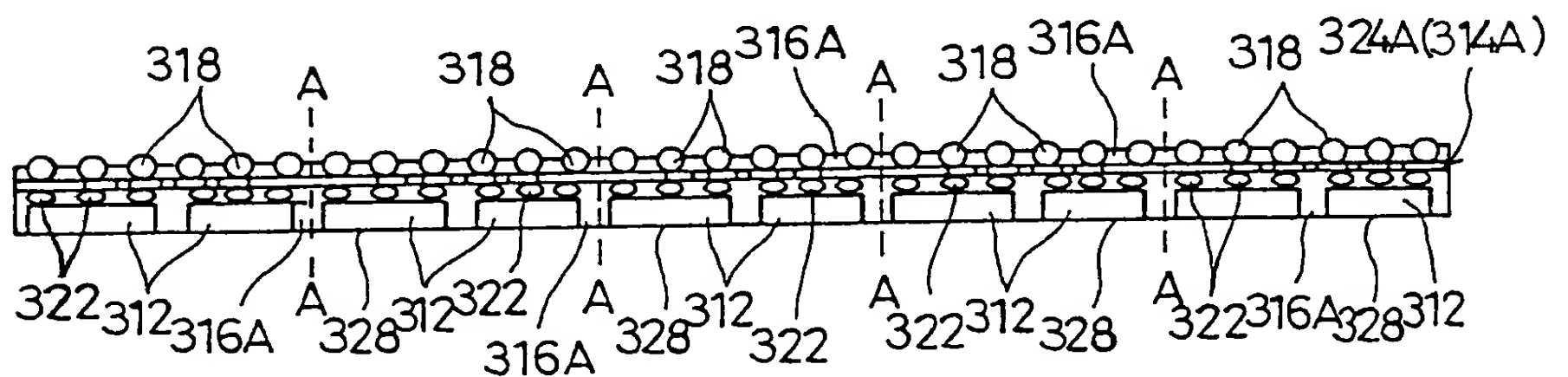


Fig. 123

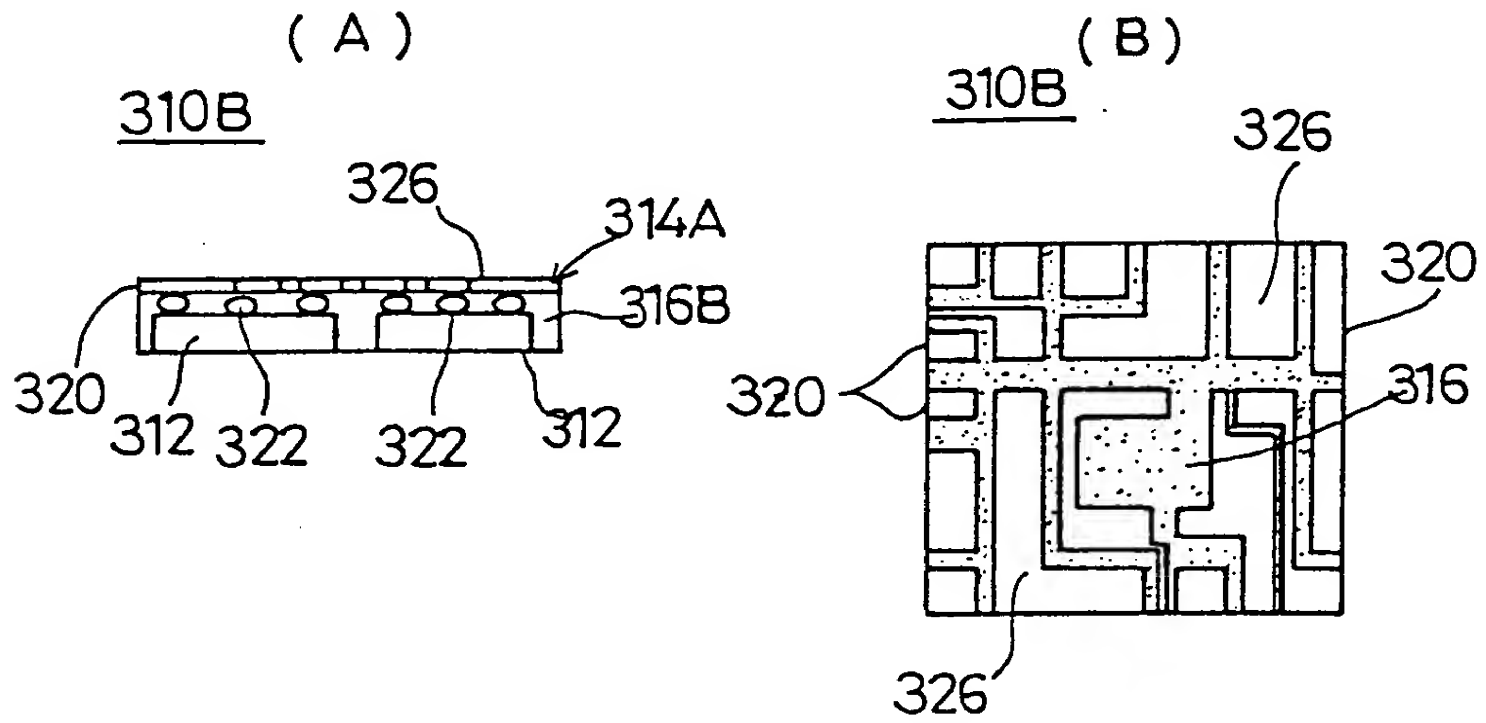


Fig. 124

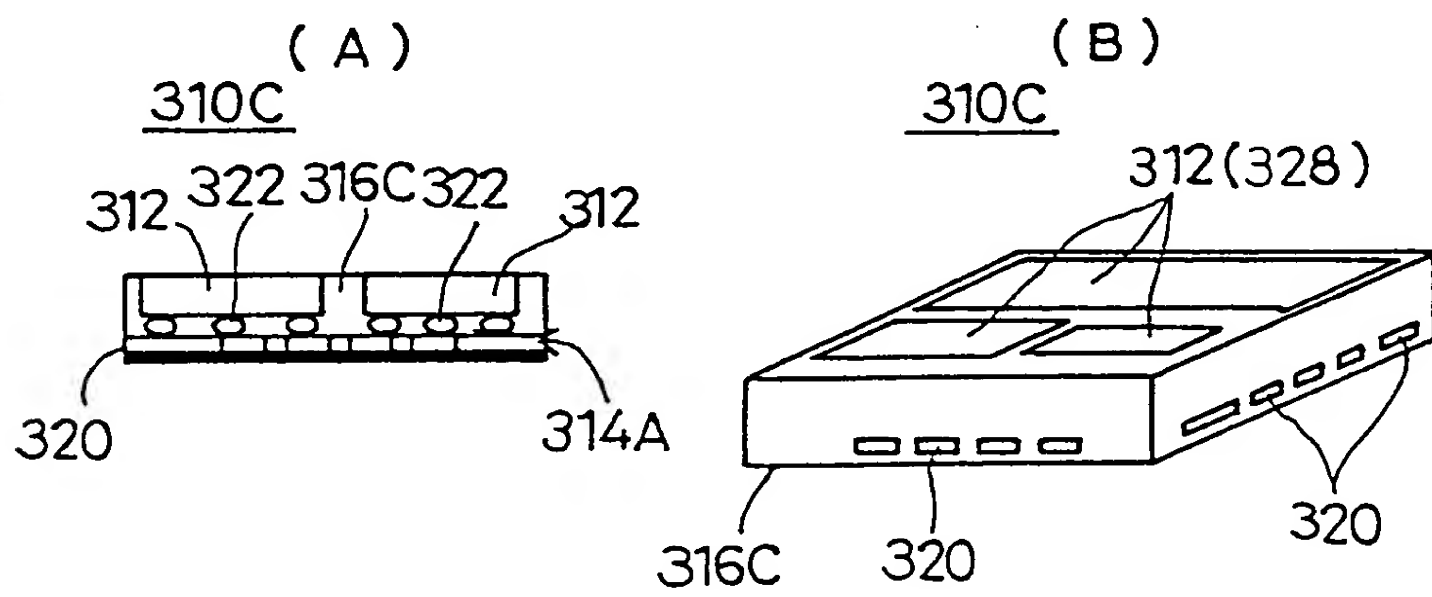


Fig. 125

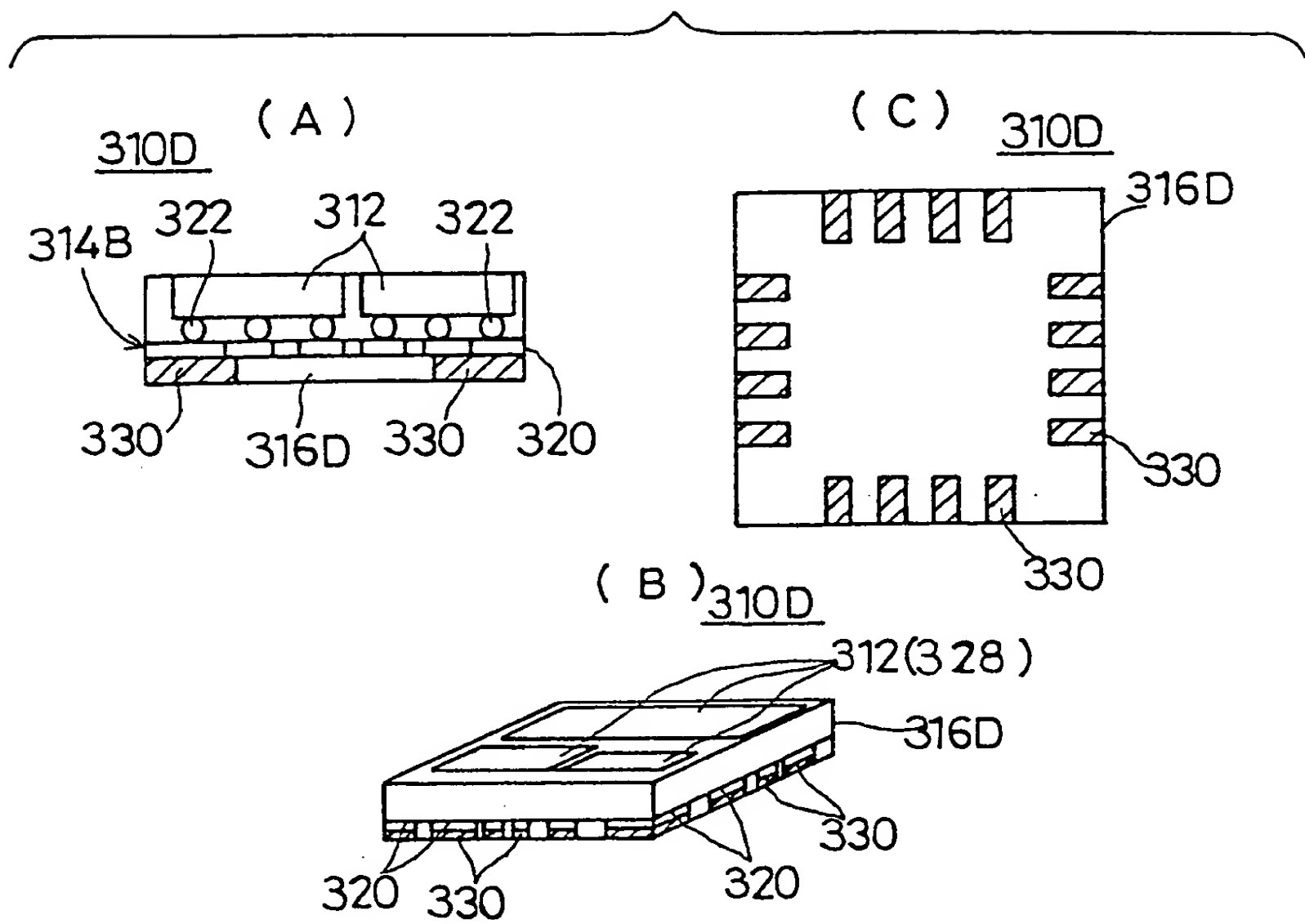


Fig. 127

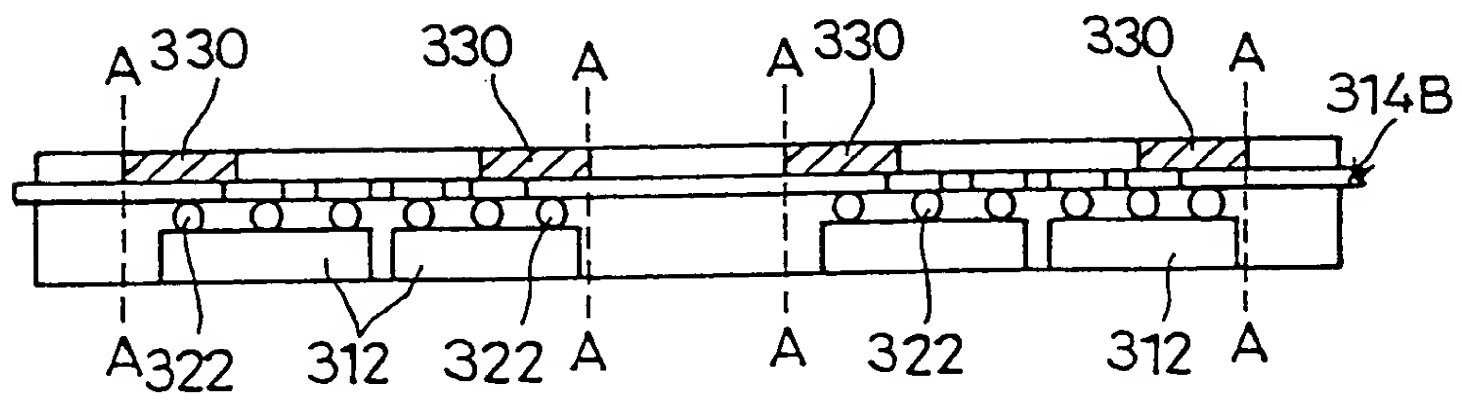


Fig. 126

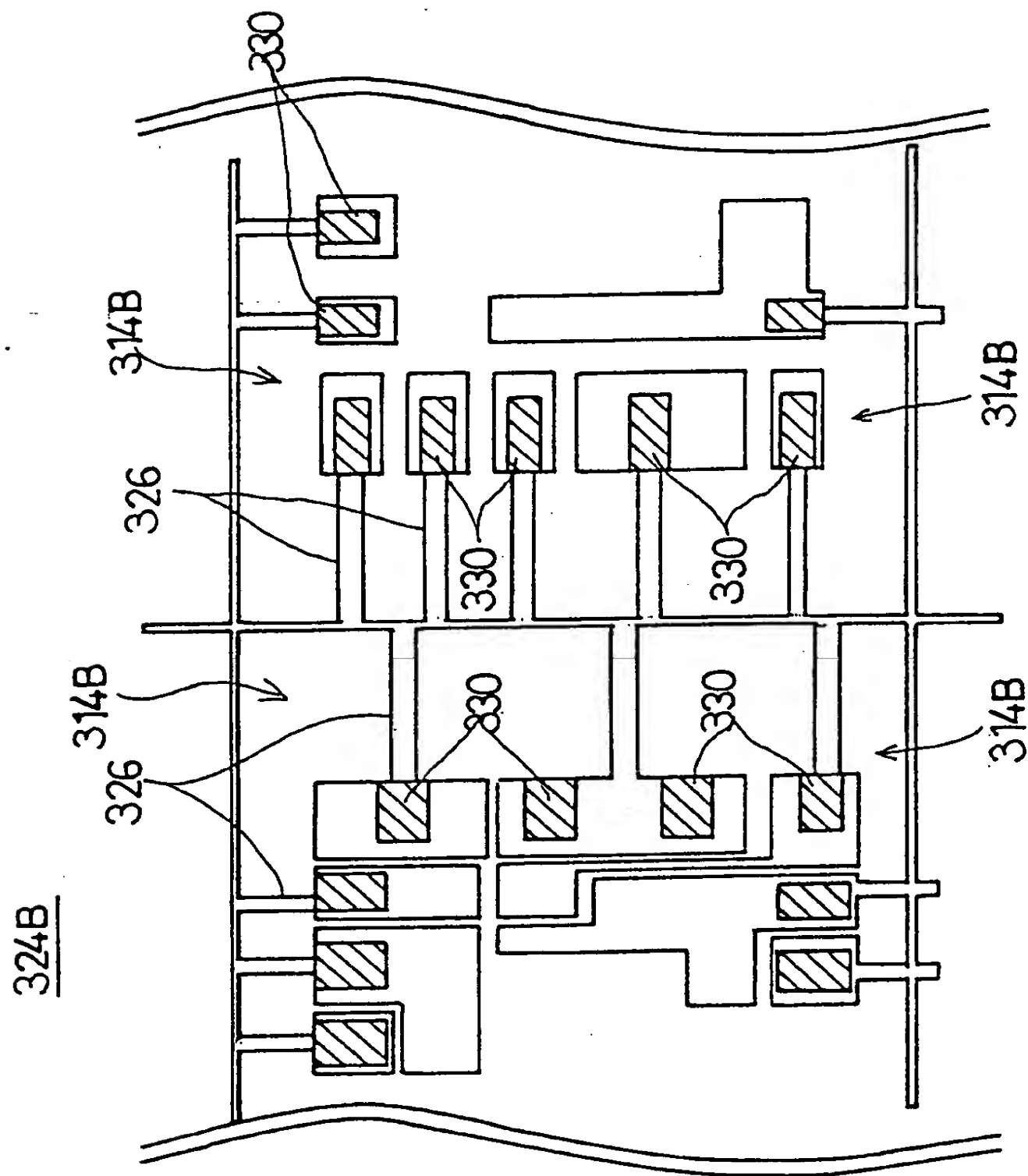


Fig. 128

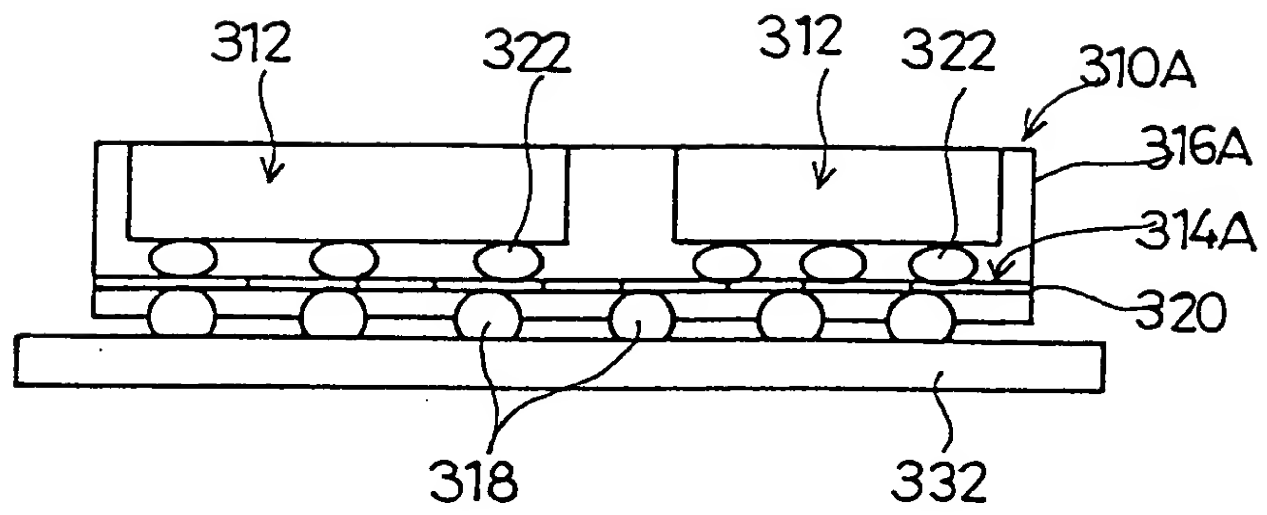


Fig. 129

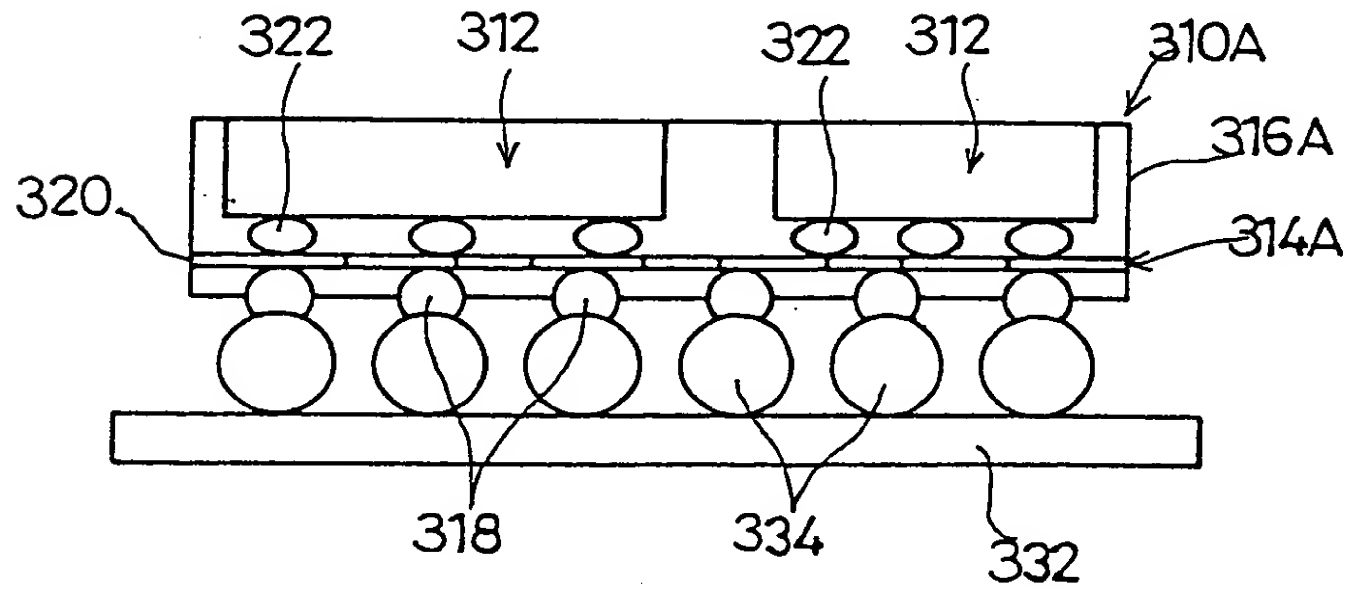


Fig. 130

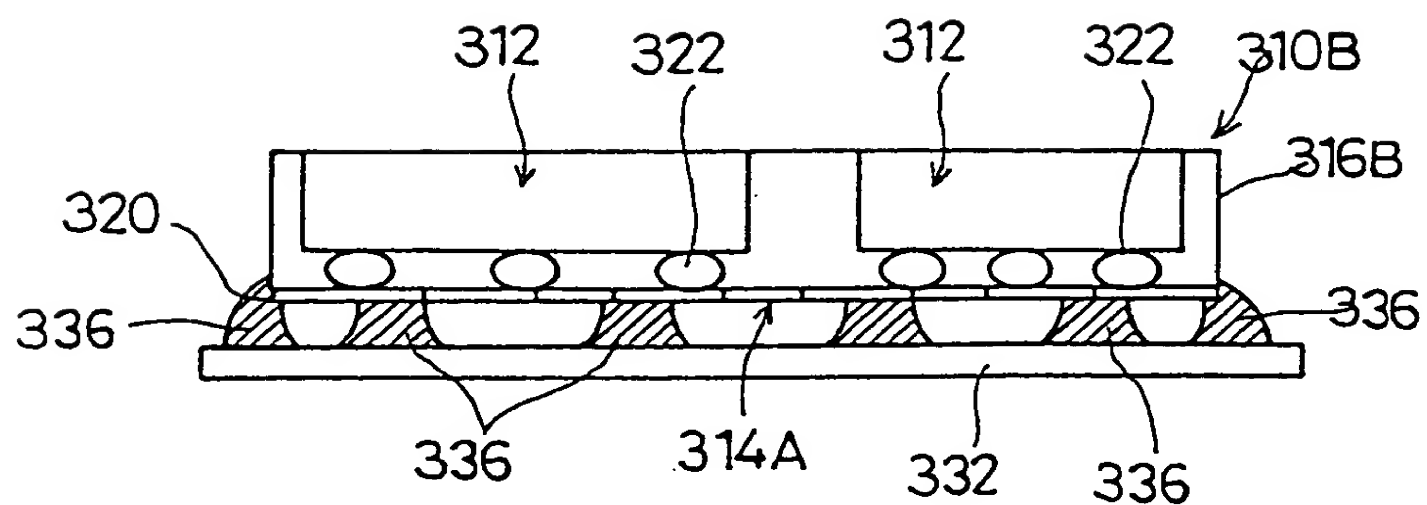
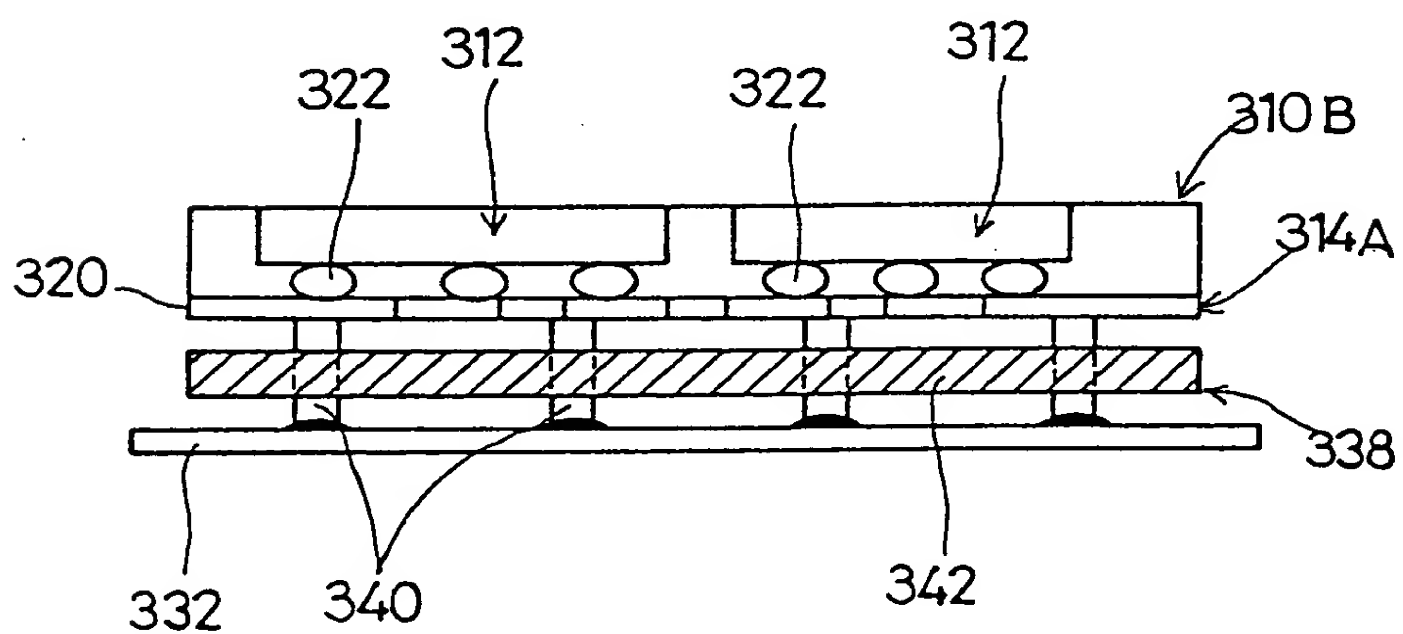


Fig. 131





0976655-051001

Fig. 132

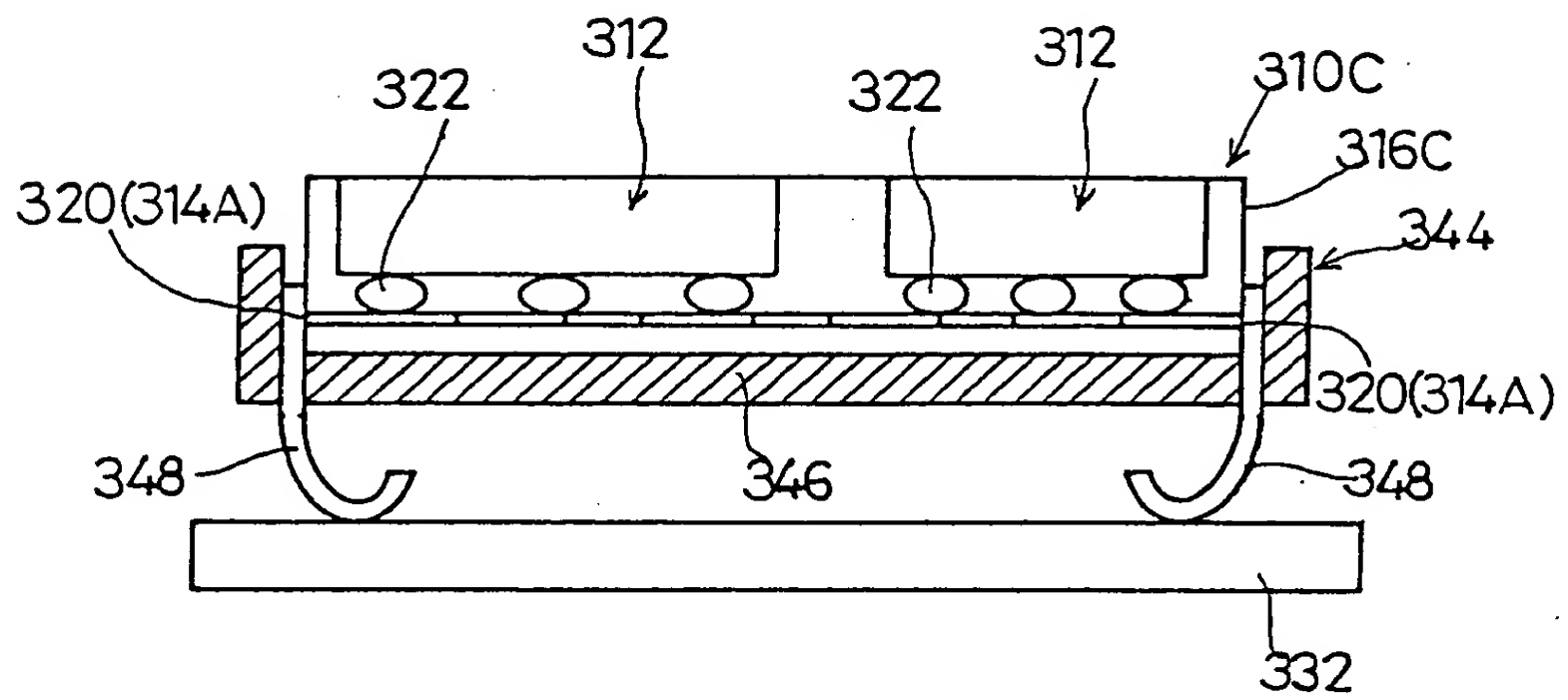


Fig. 133

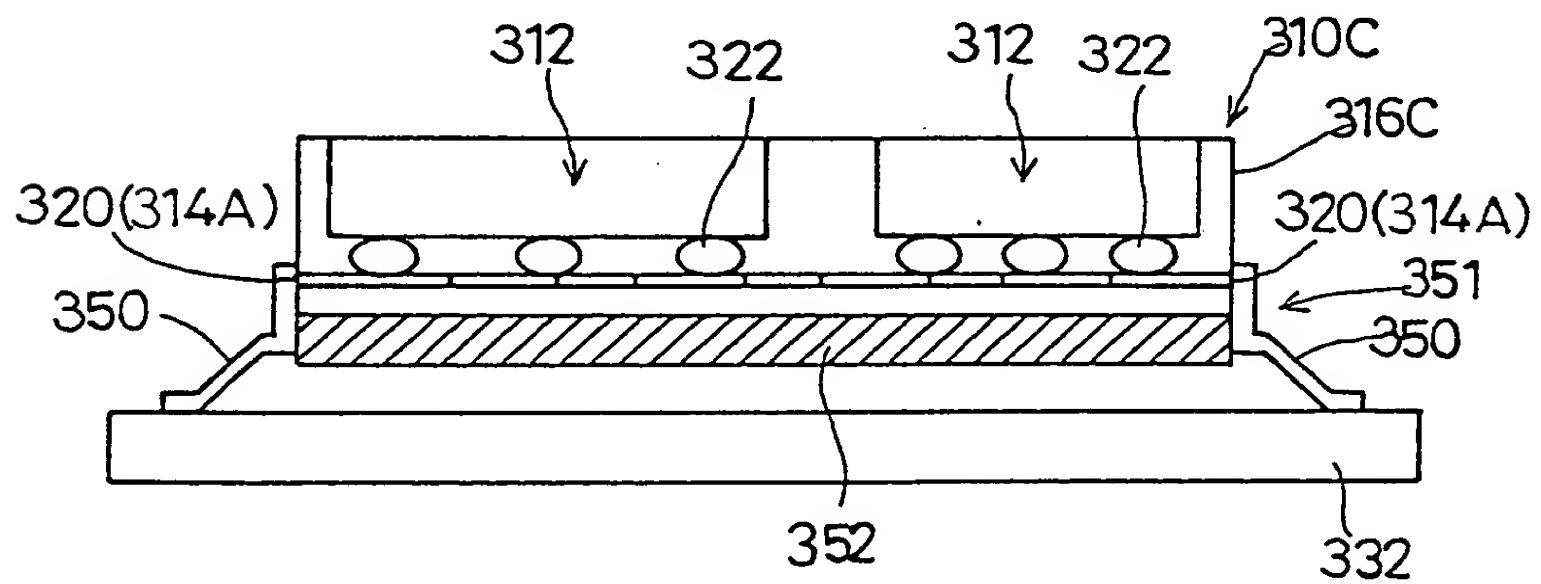


Fig. 134

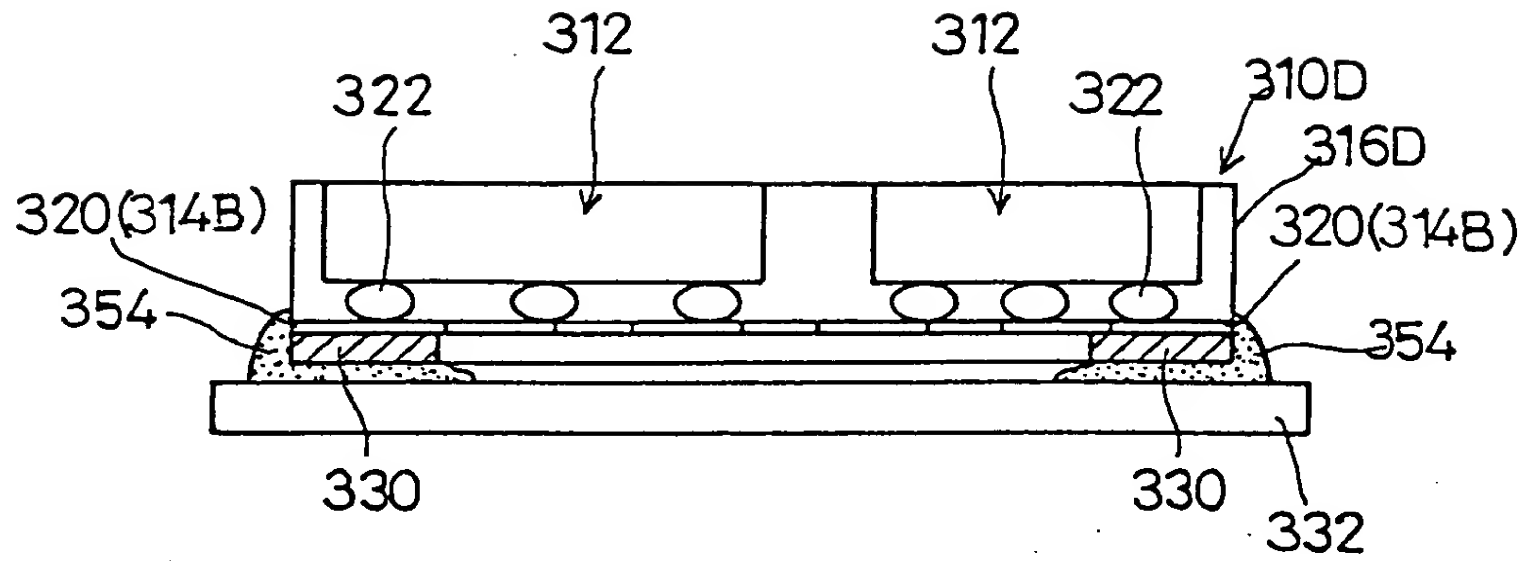


Fig. 135

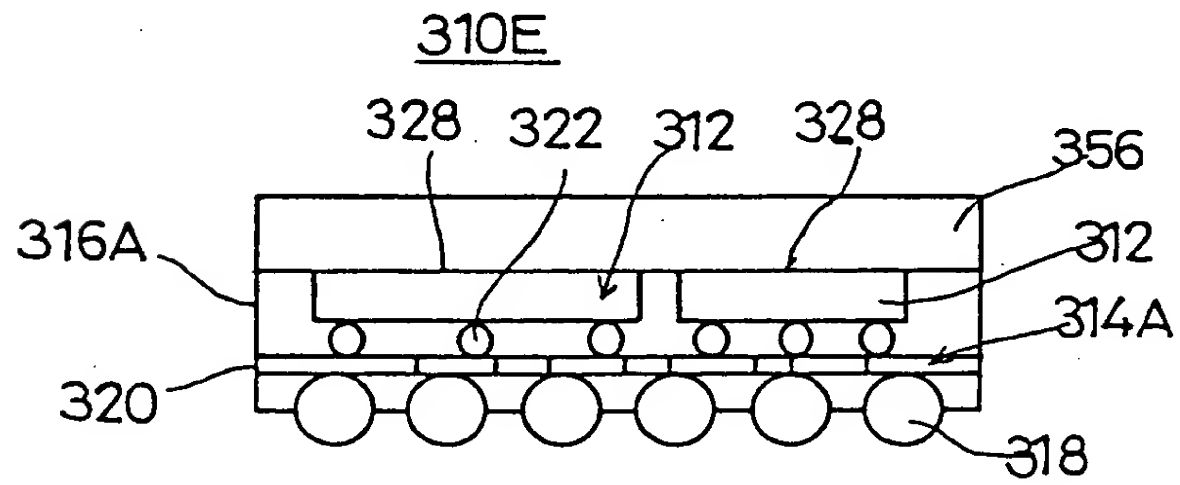


Fig. 136

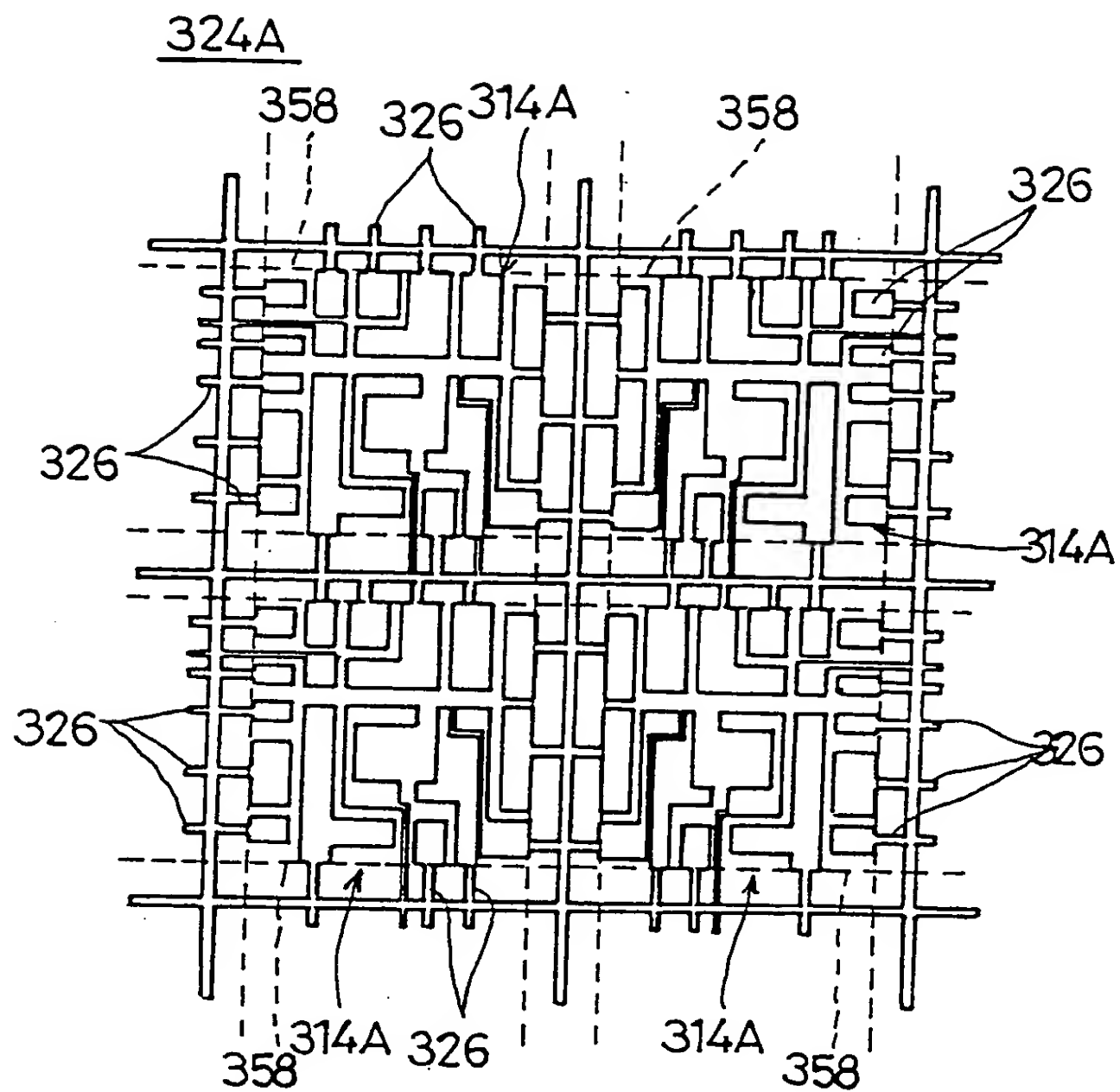


Fig. 137

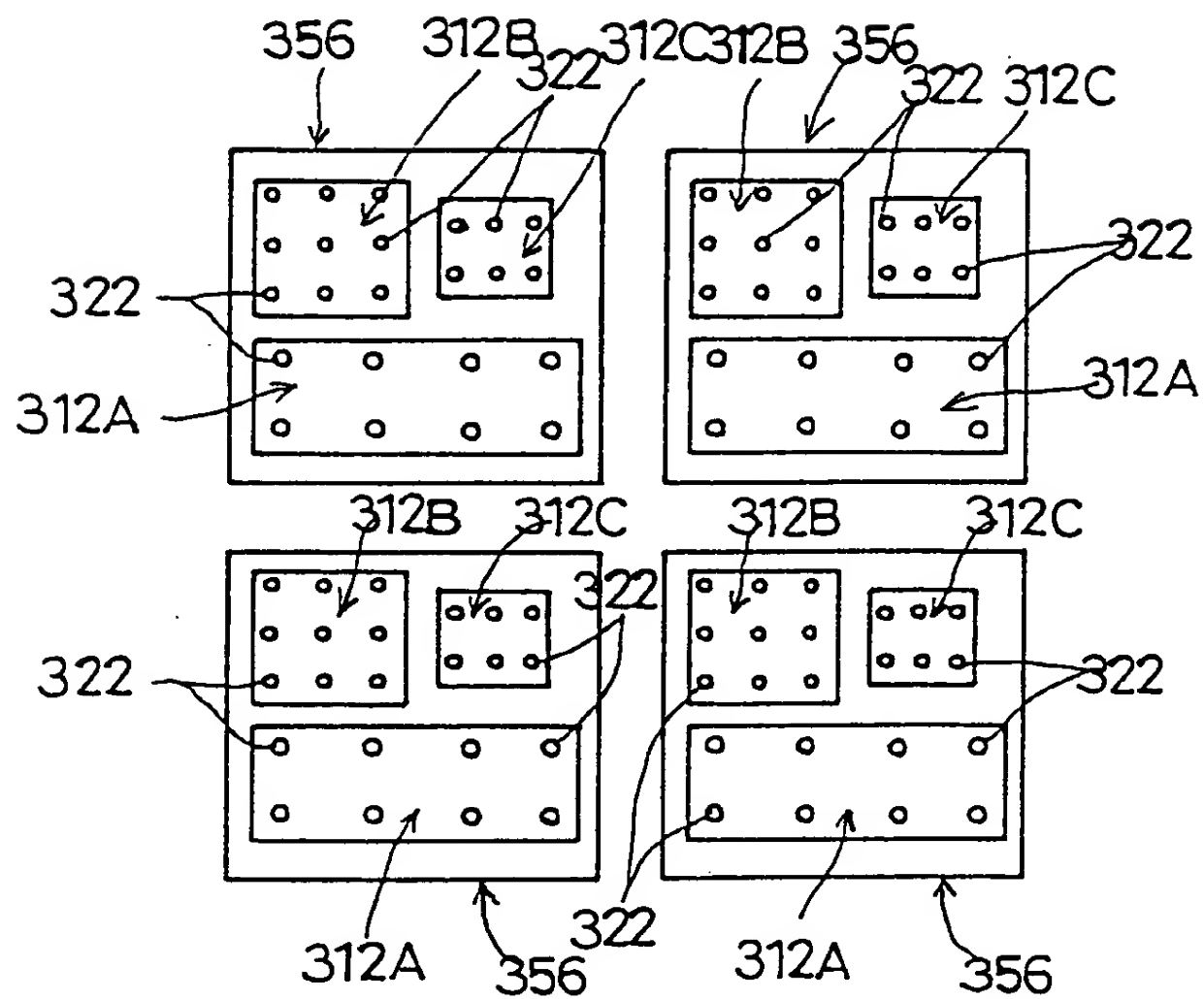


Fig. 138

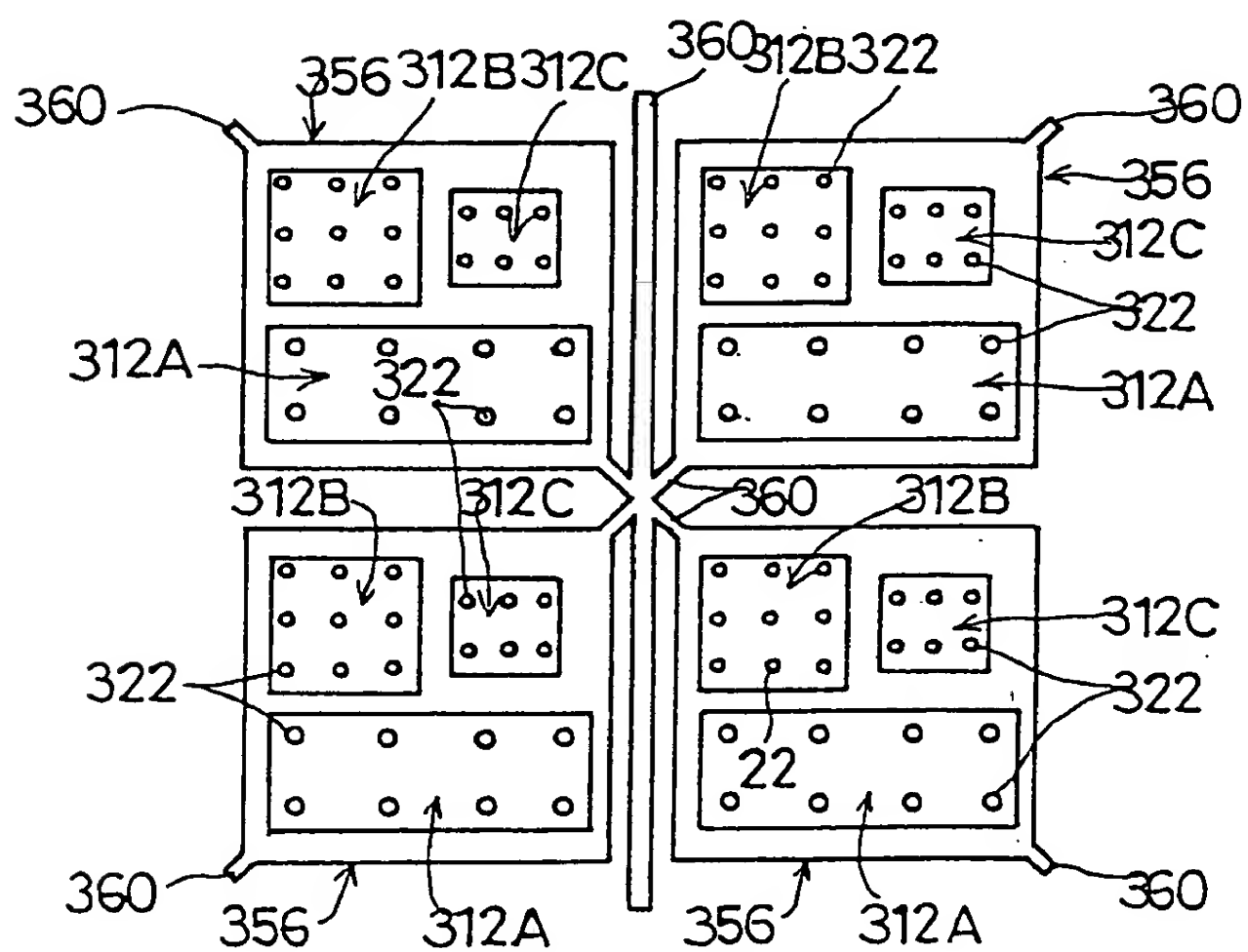


Fig. 139

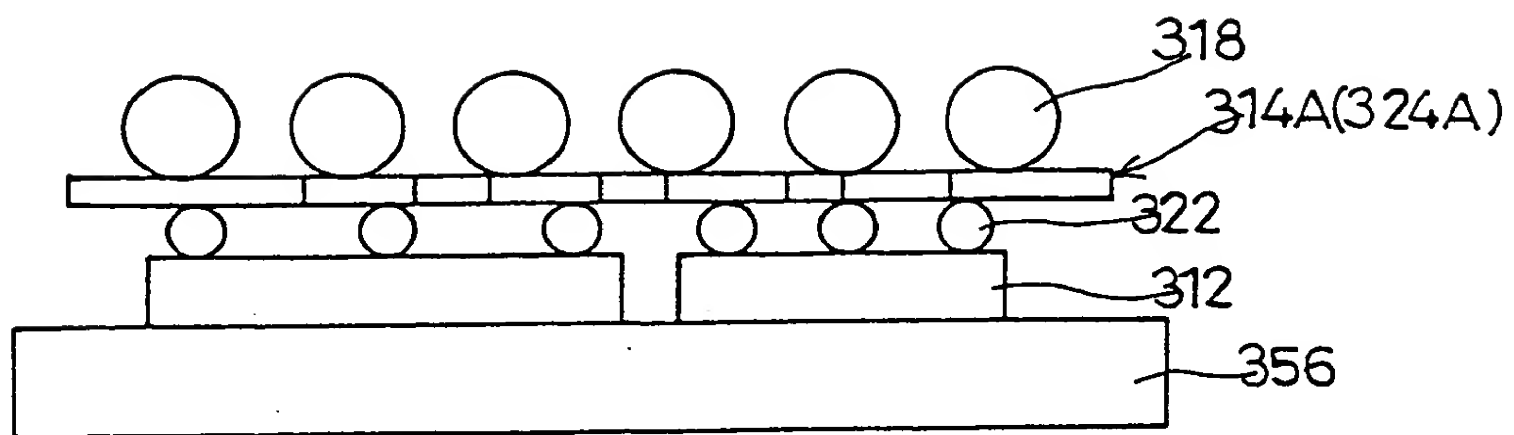


Fig. 140

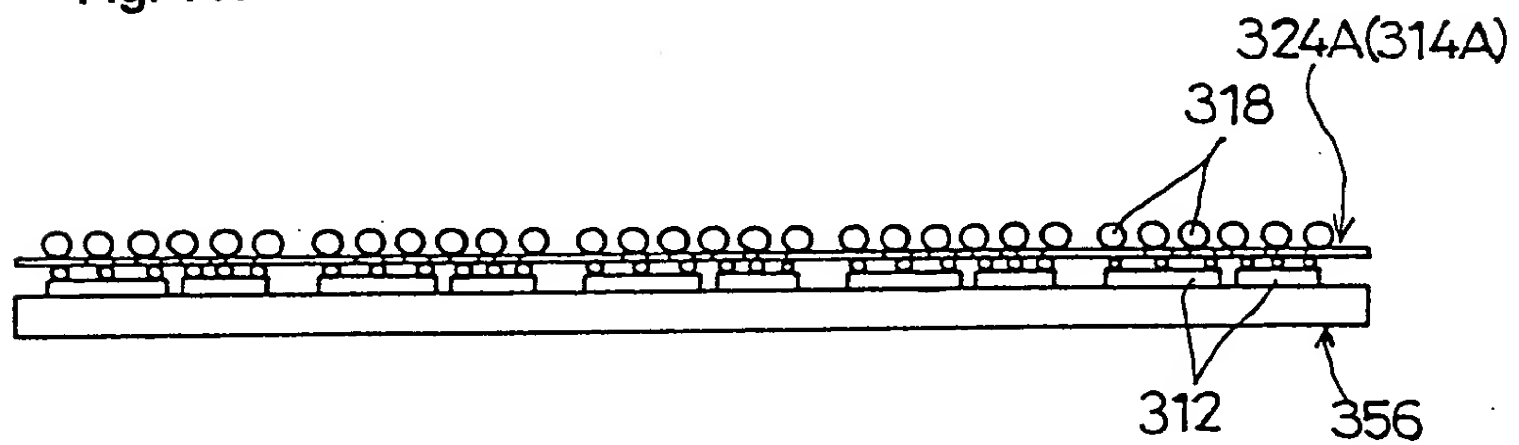


Fig. 141

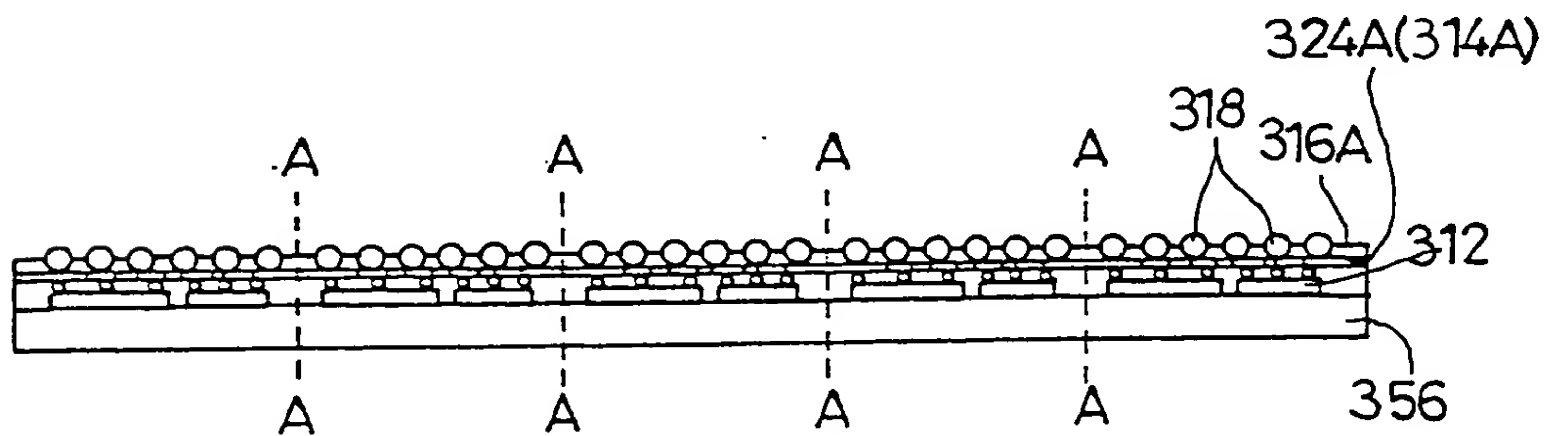


Fig. 142

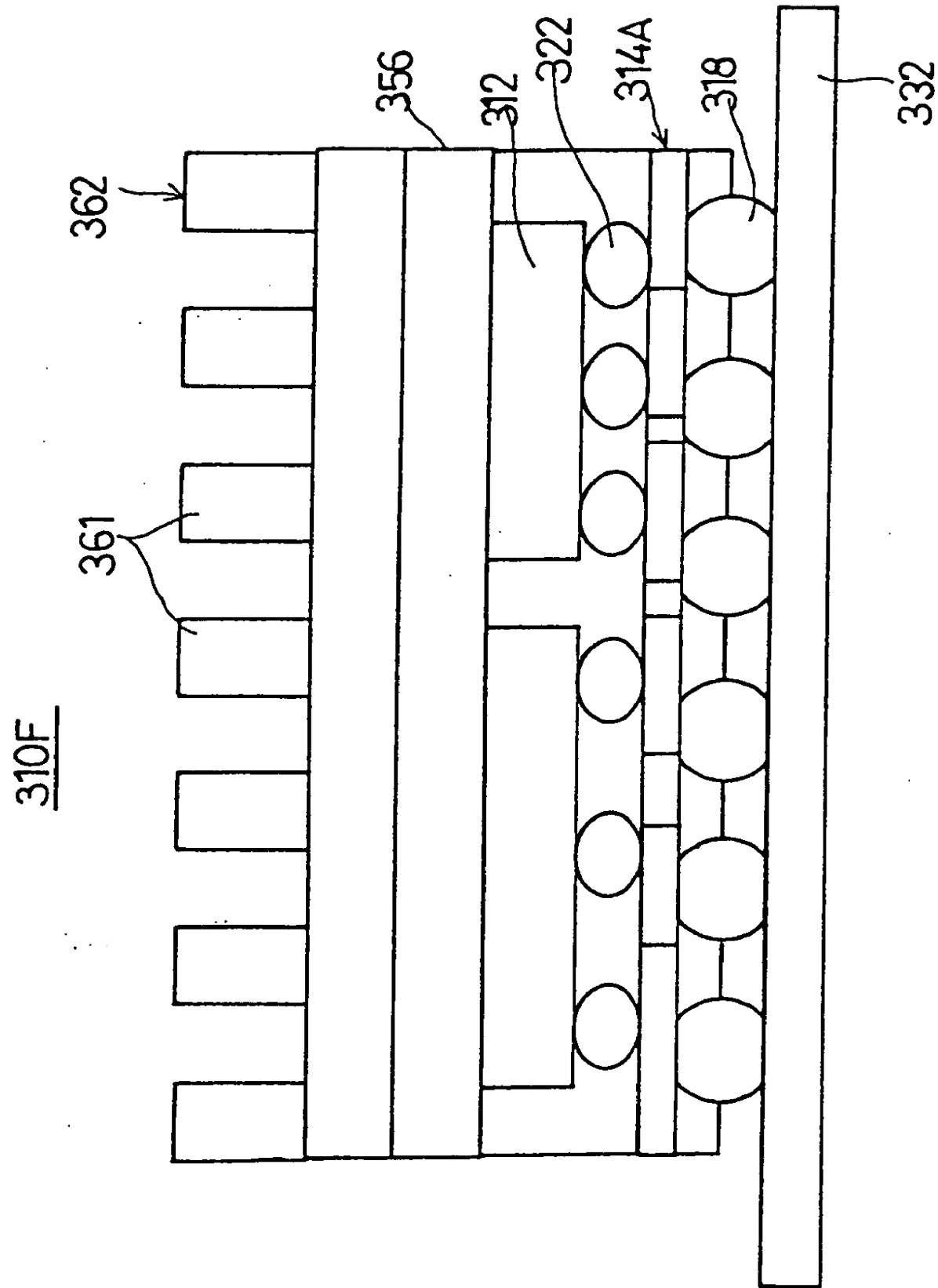


Fig. 143

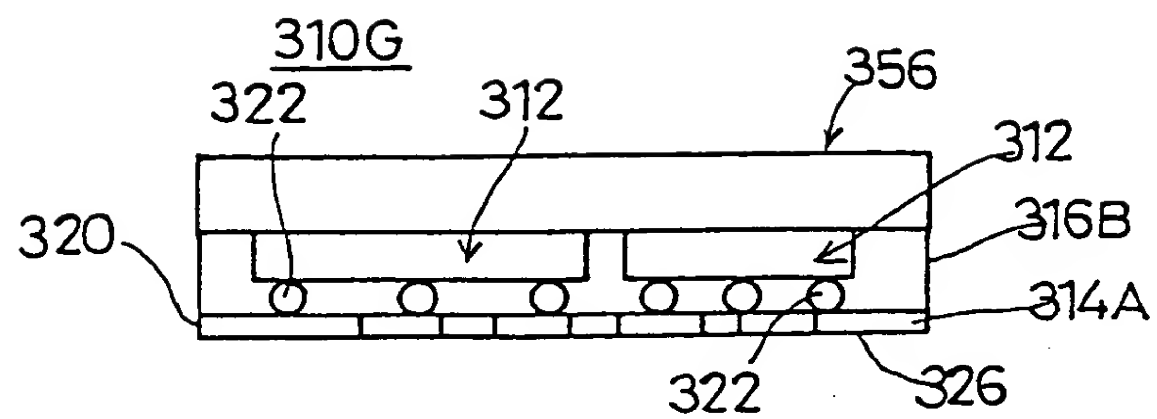


Fig. 144

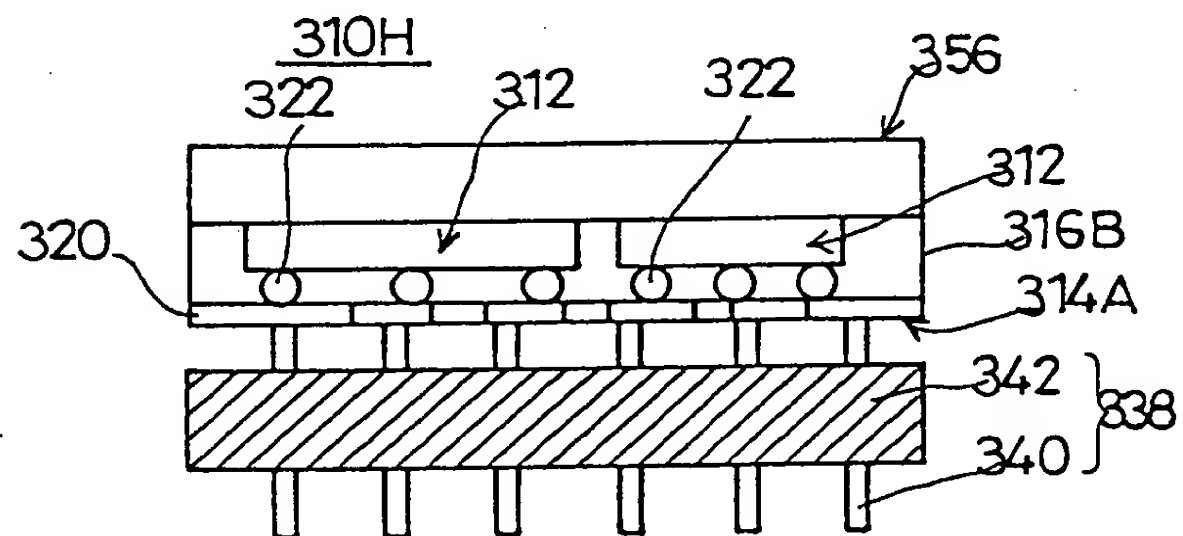


Fig. 145

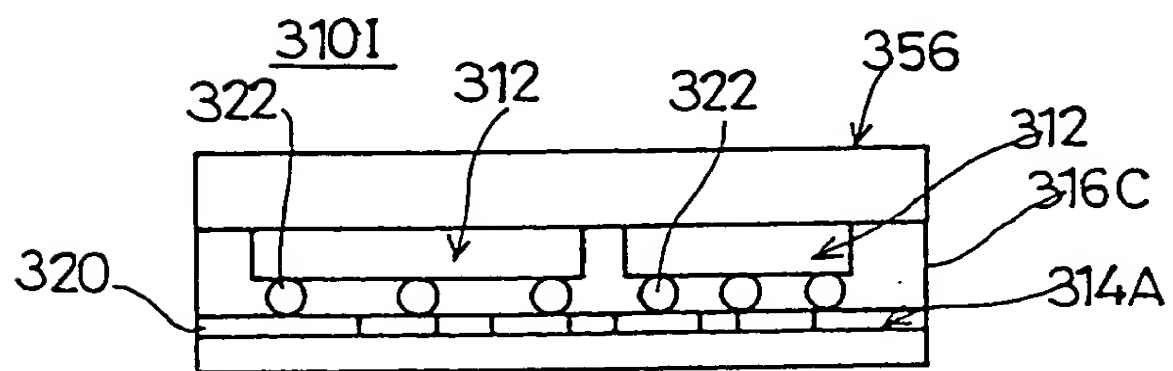


Fig. 146

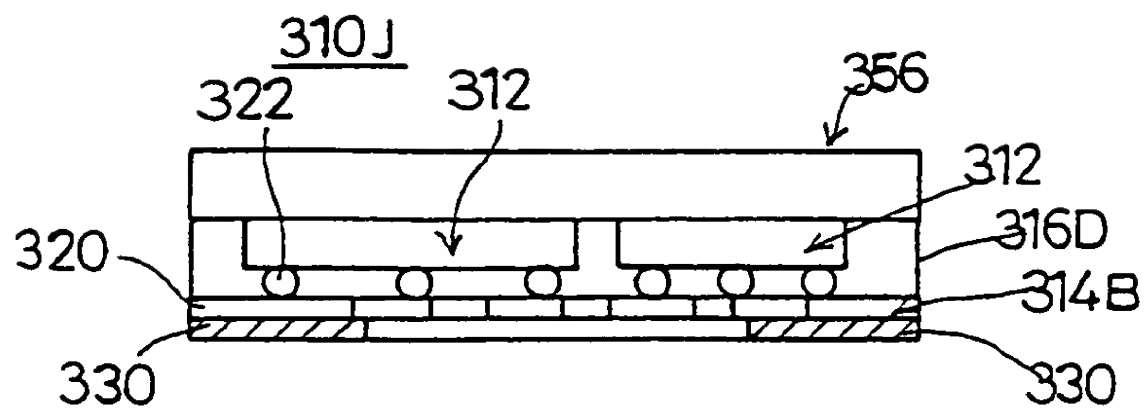


Fig. 147

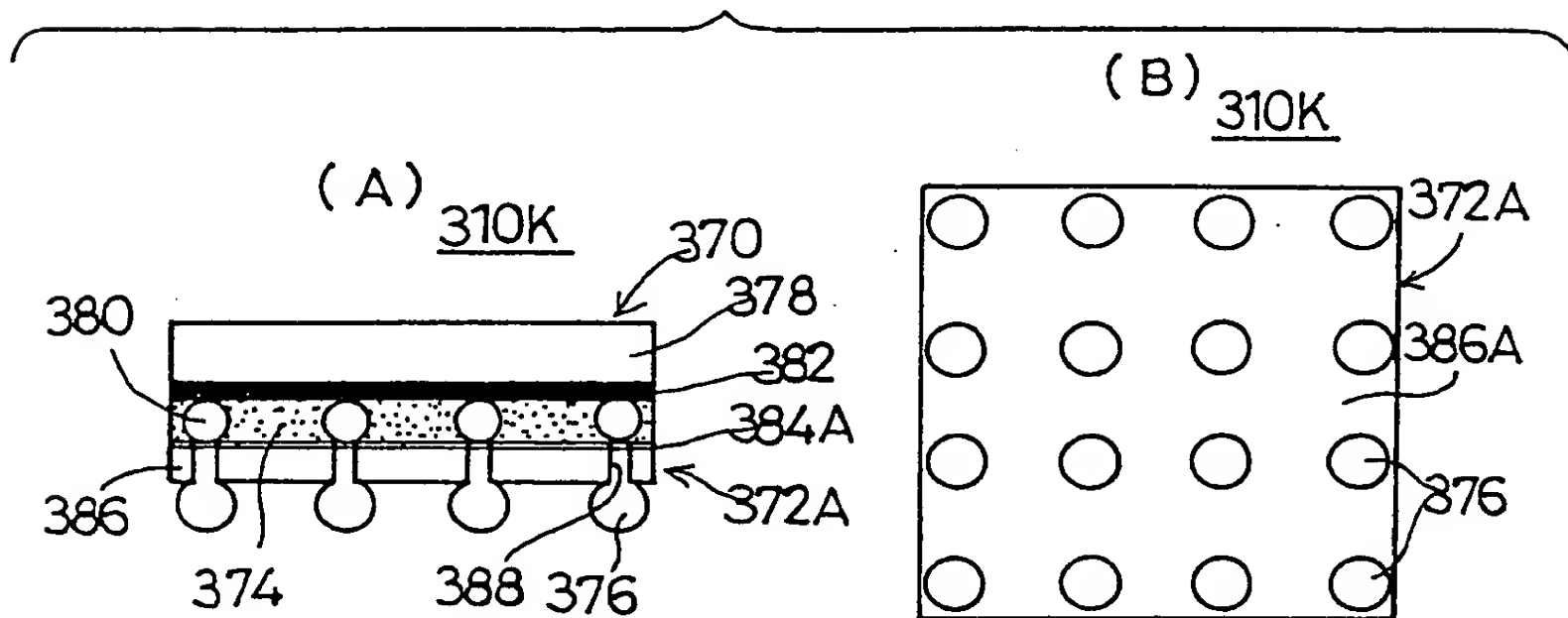
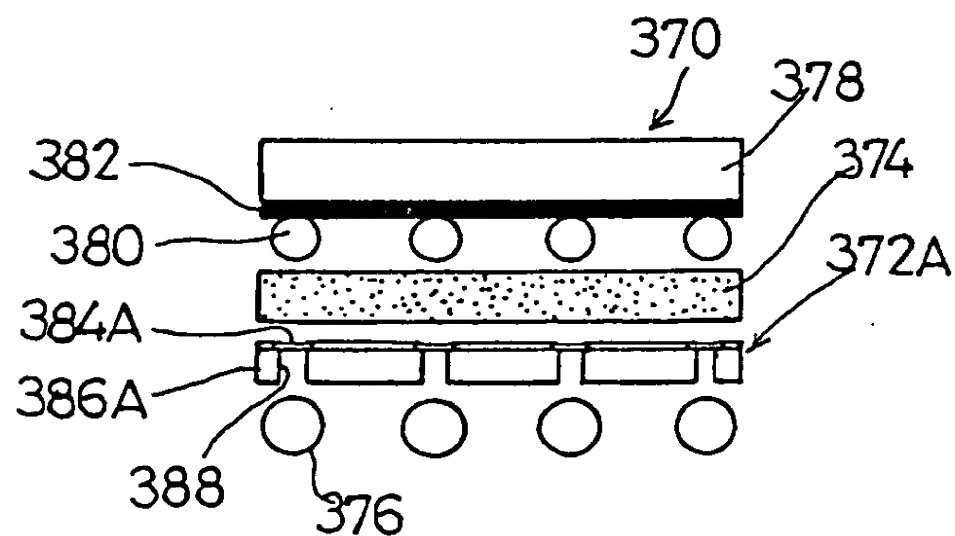


Fig. 148





09766556-061901

Fig. 149

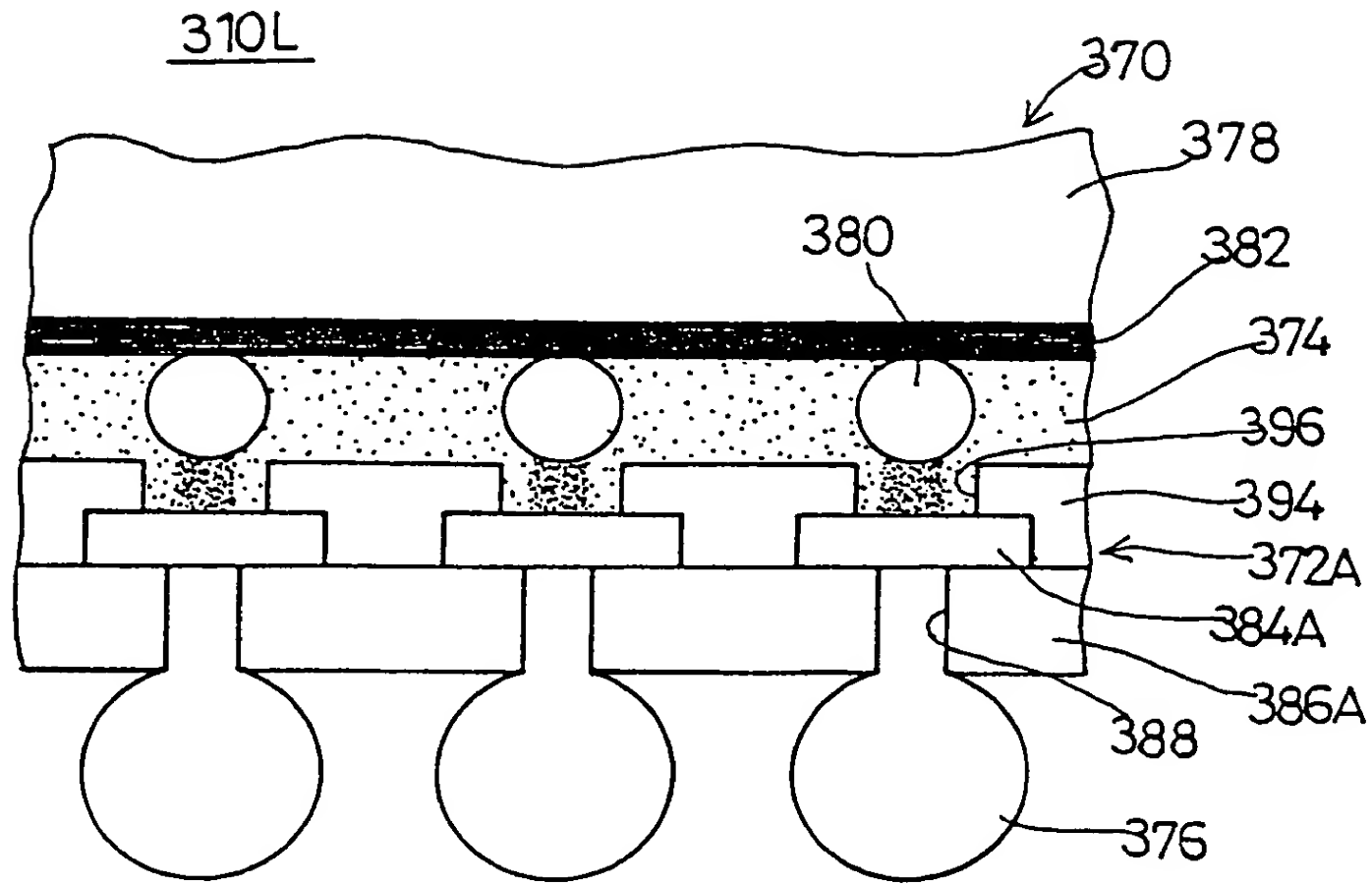


Fig. 150

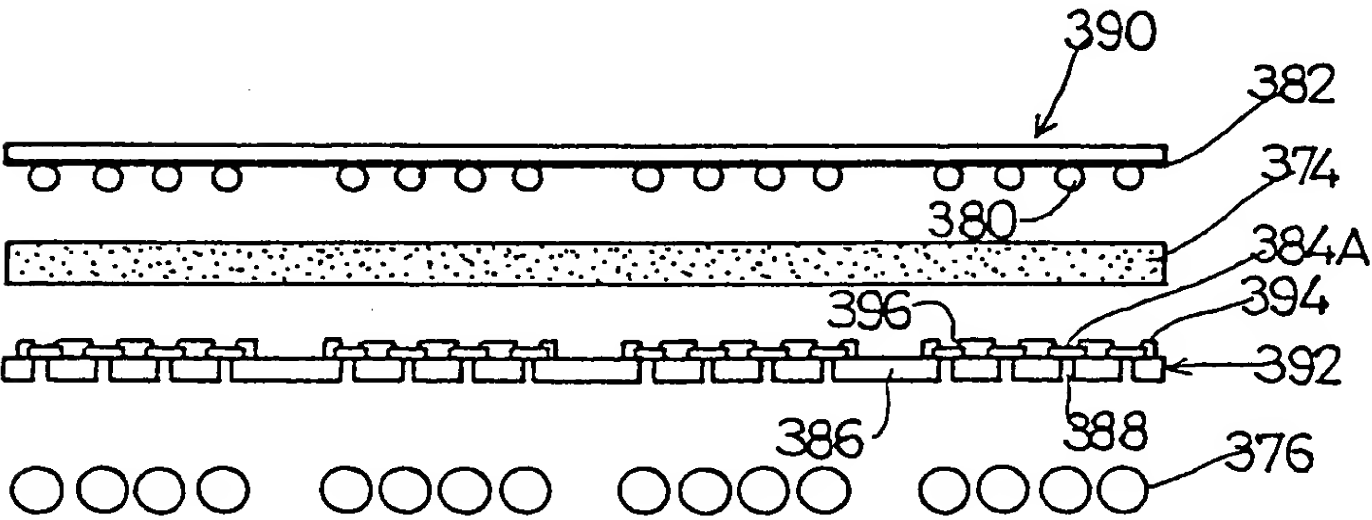


Fig. 151

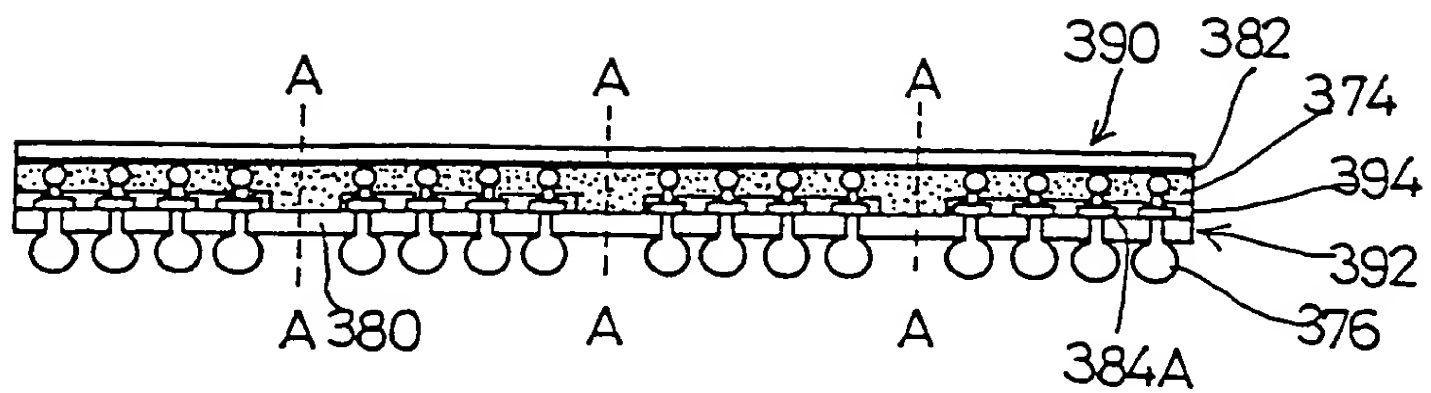


Fig. 152

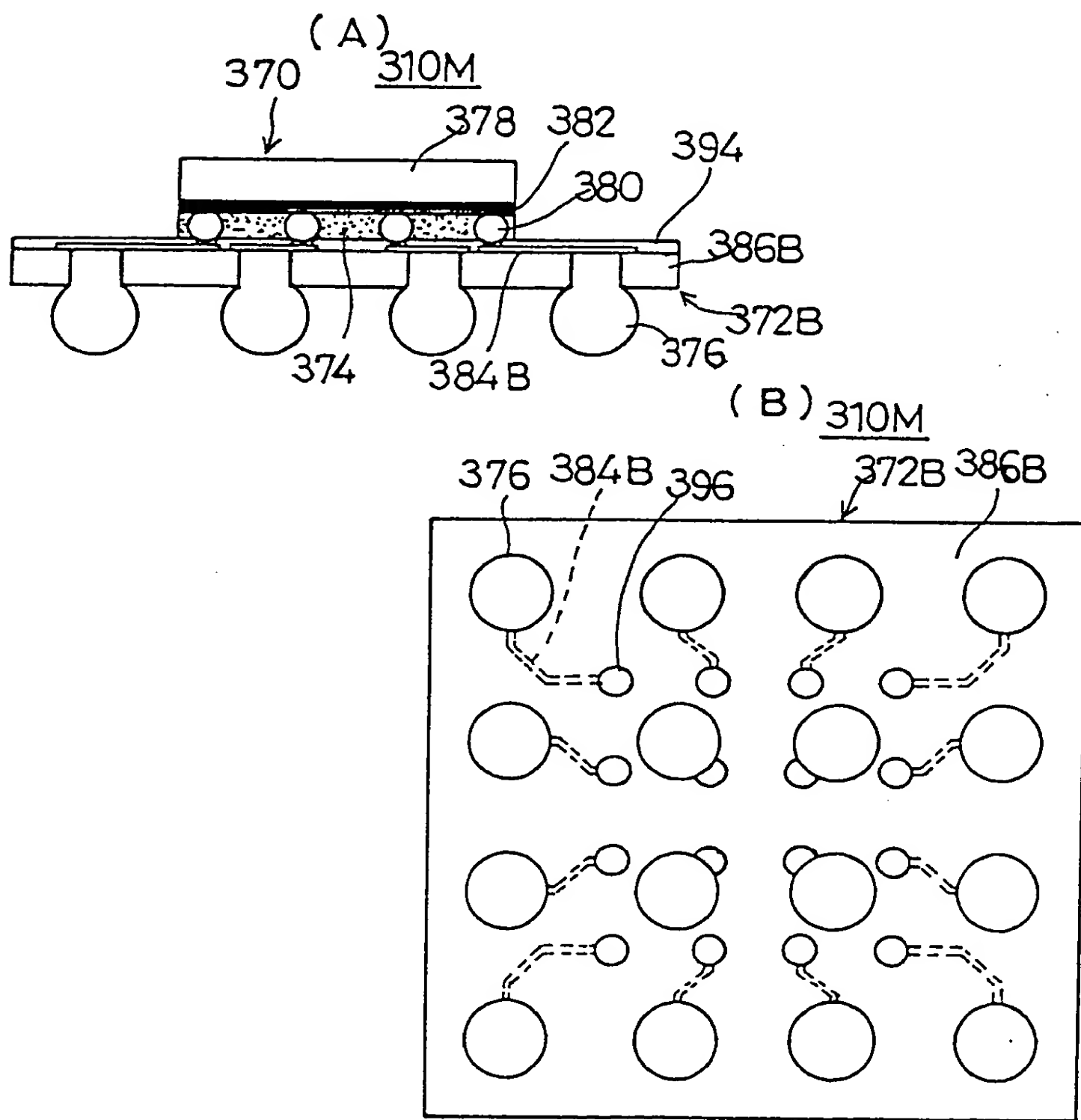


Fig. 153

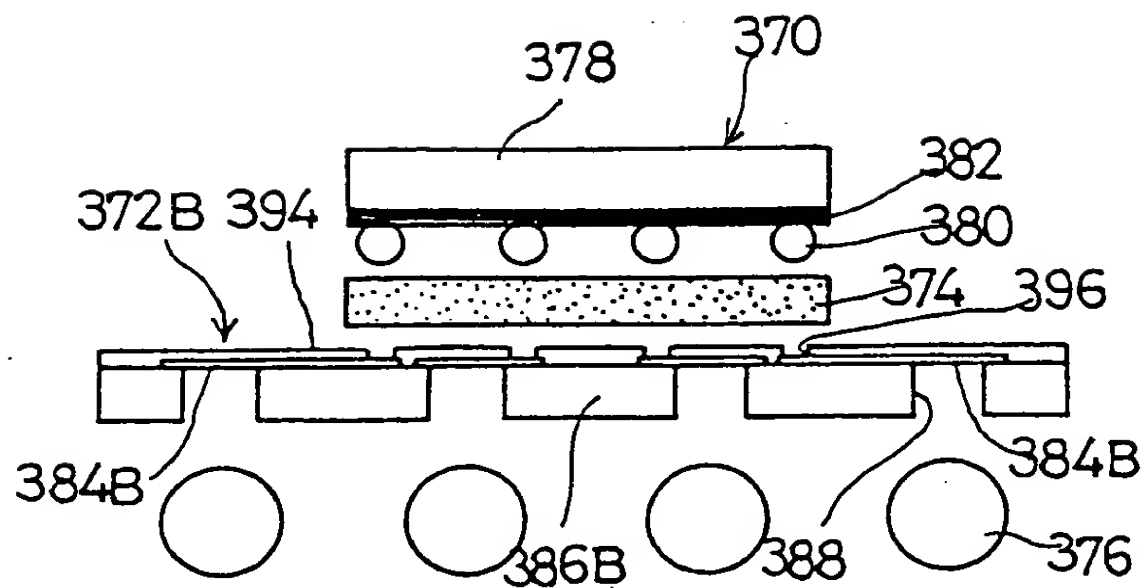


Fig. 154

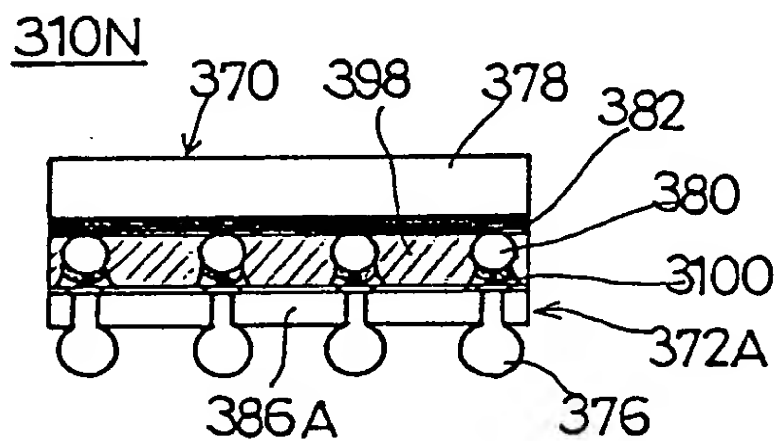
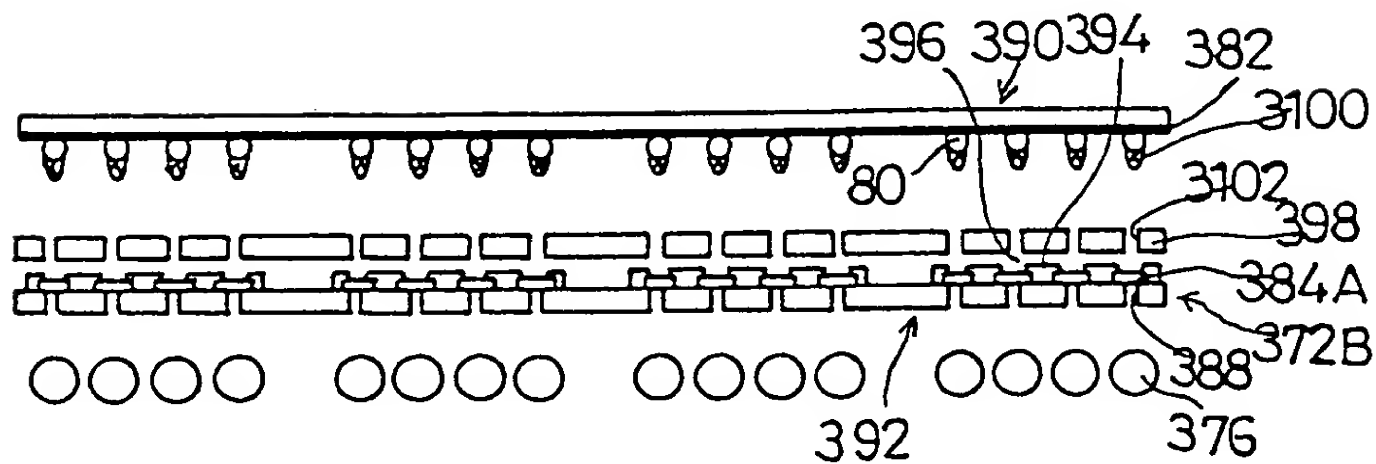


Fig. 155



09766556-061901

Fig. 156

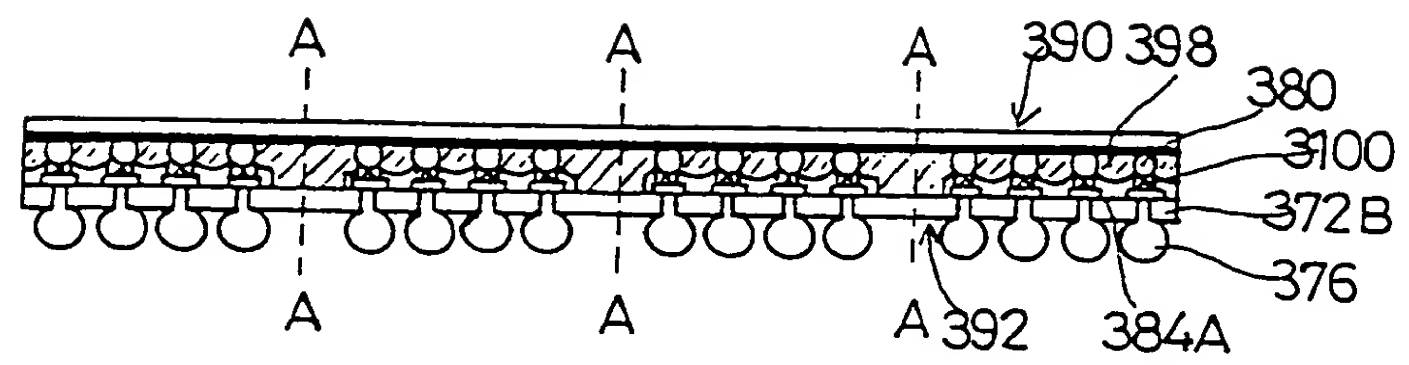


Fig. 157

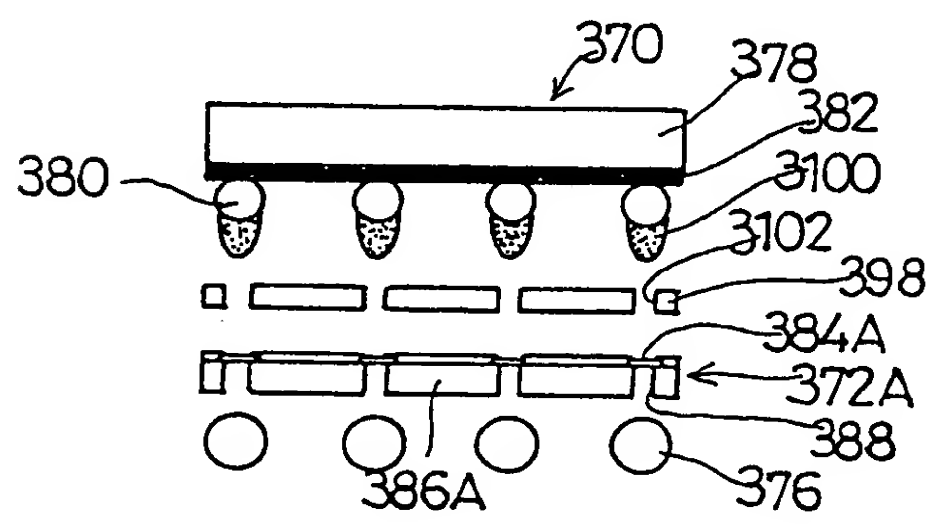
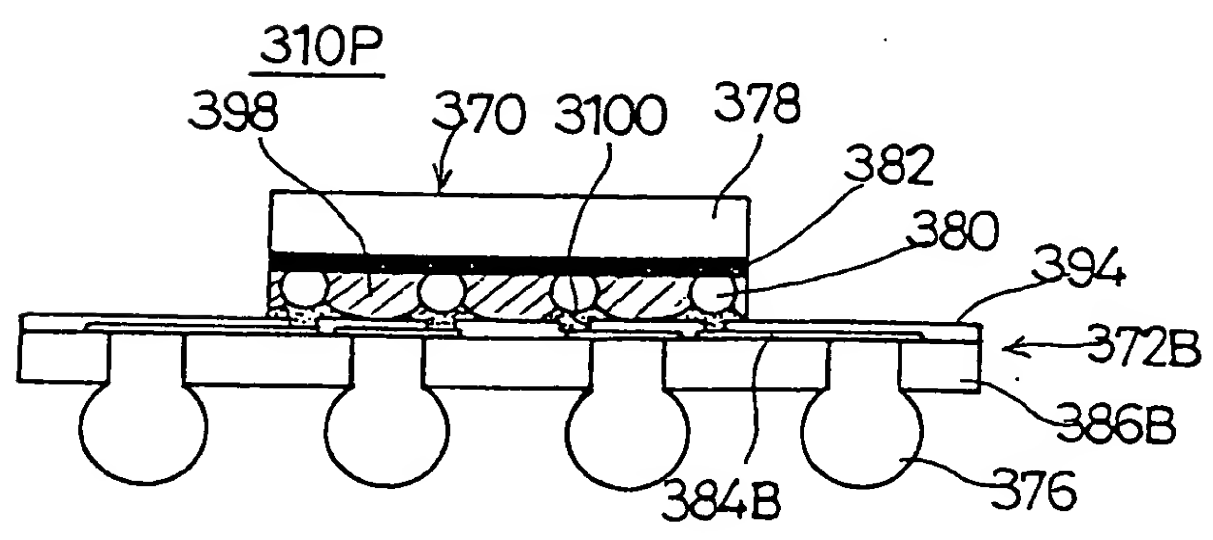


Fig. 158



0976656-061901  
FIG. 159

Fig. 159

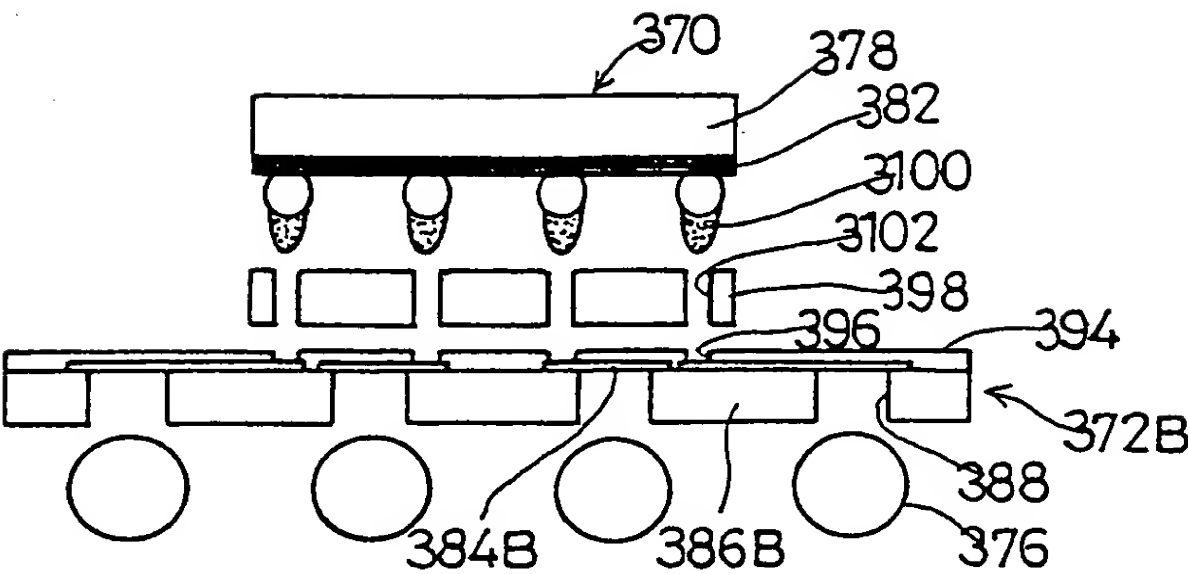


Fig. 160

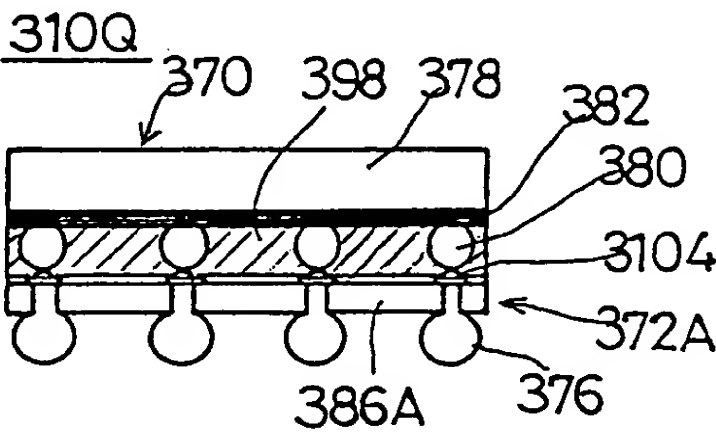


Fig. 161

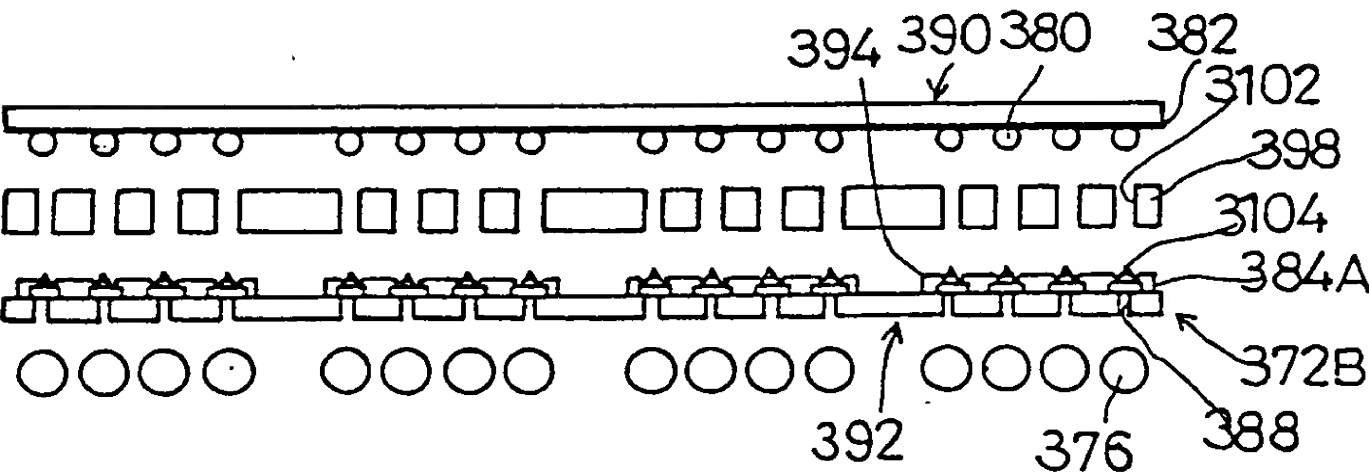


Fig. 162

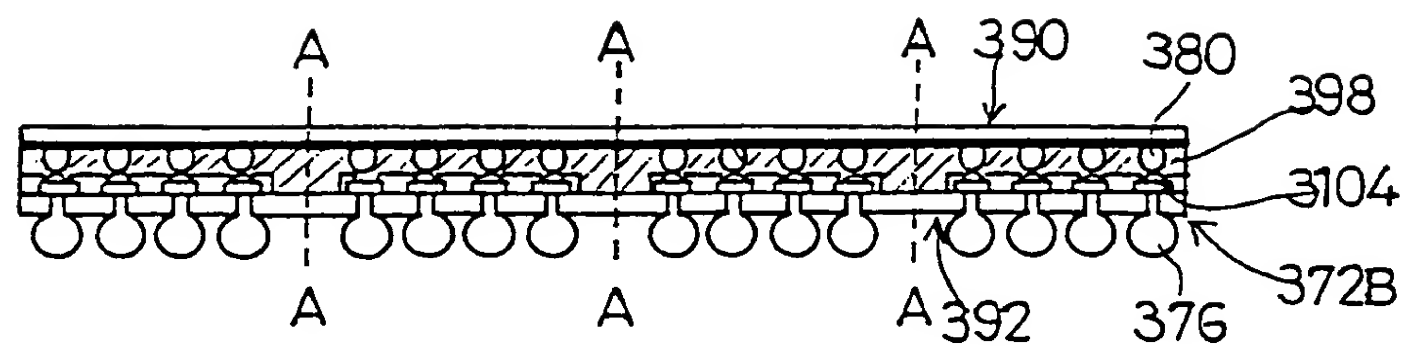


Fig. 163

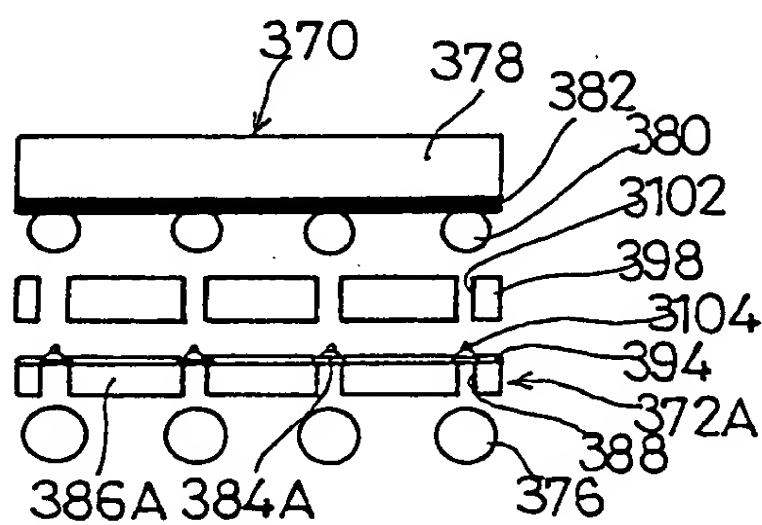


Fig. 164

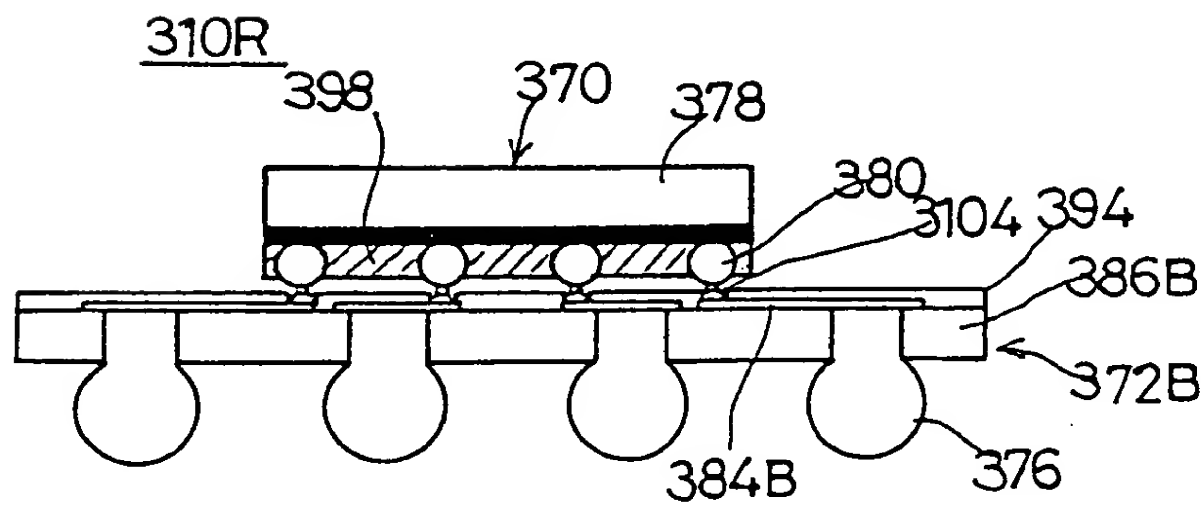


Fig. 165

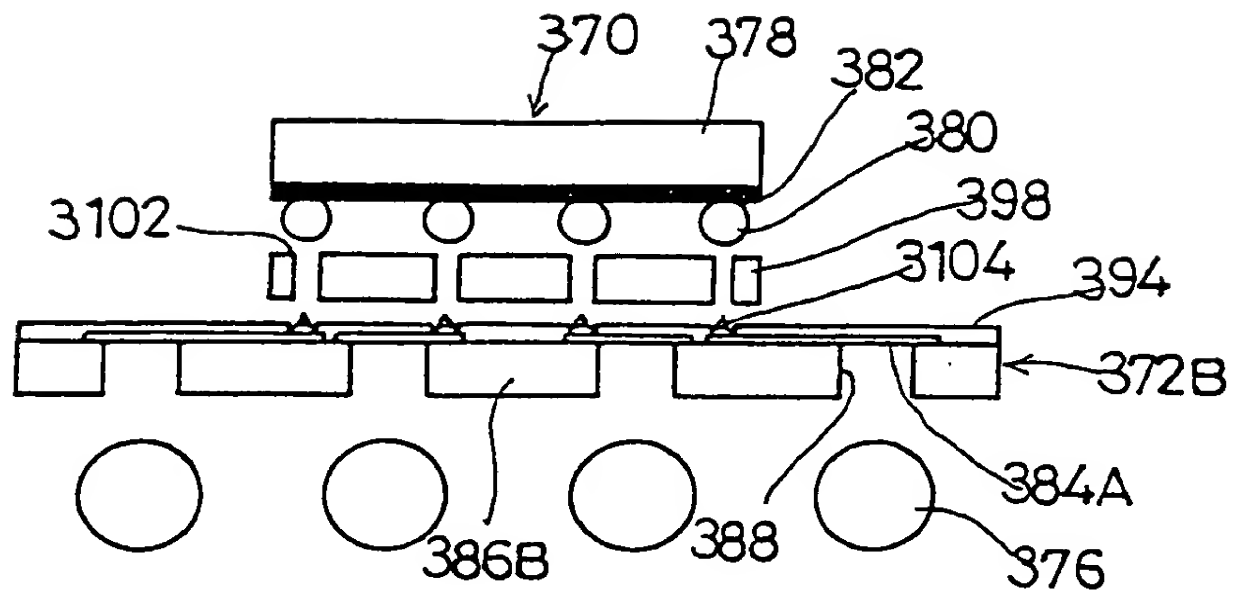


Fig. 166

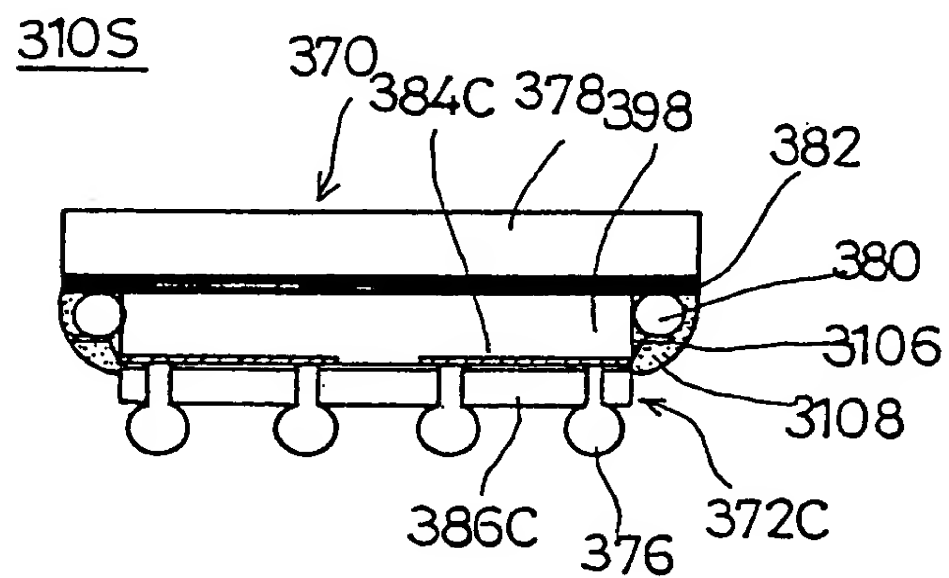


Fig. 167

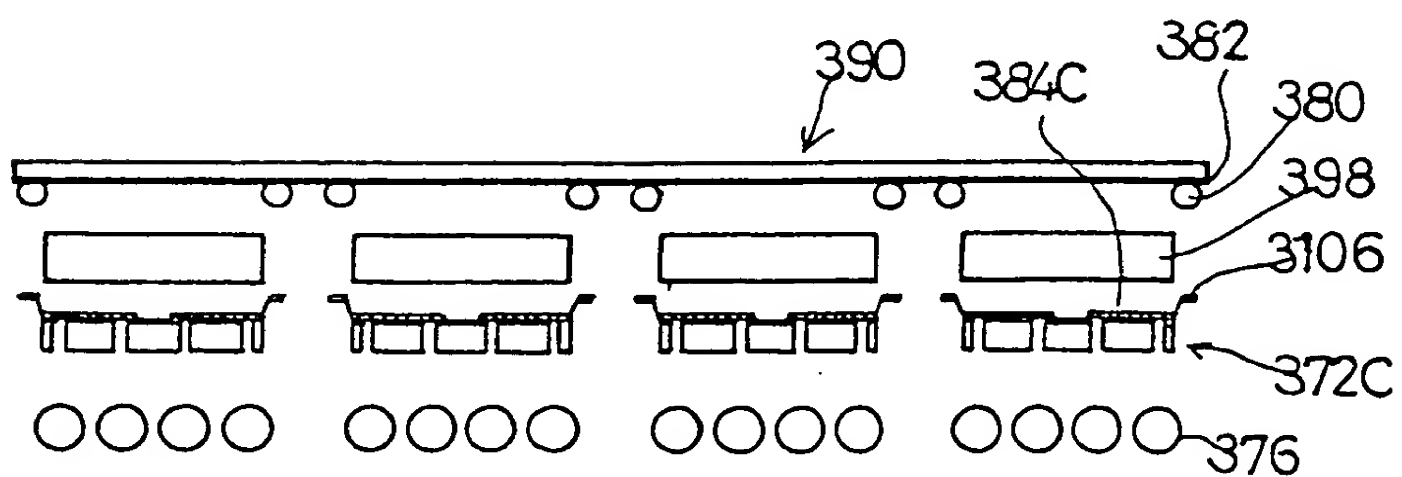


Fig. 168

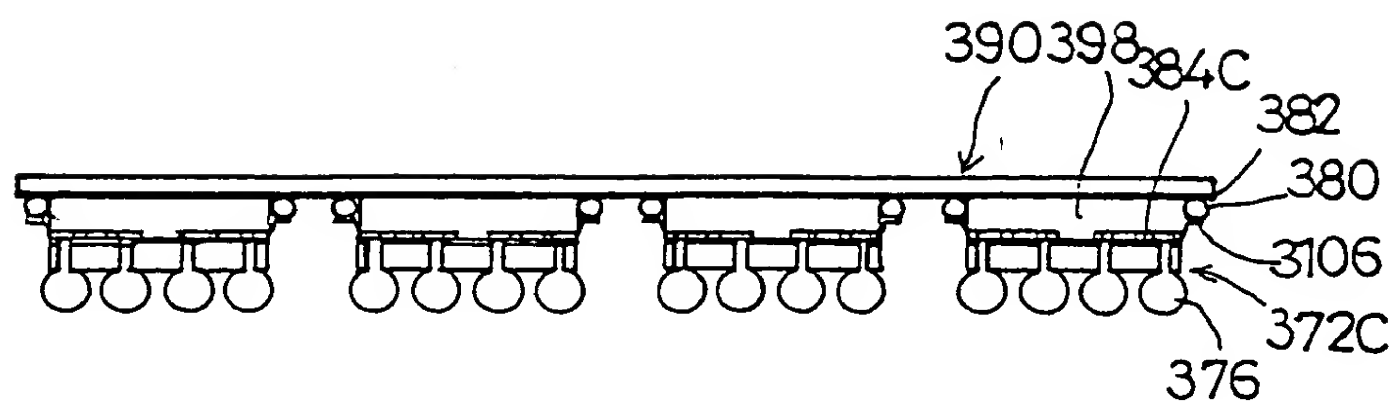


Fig. 169

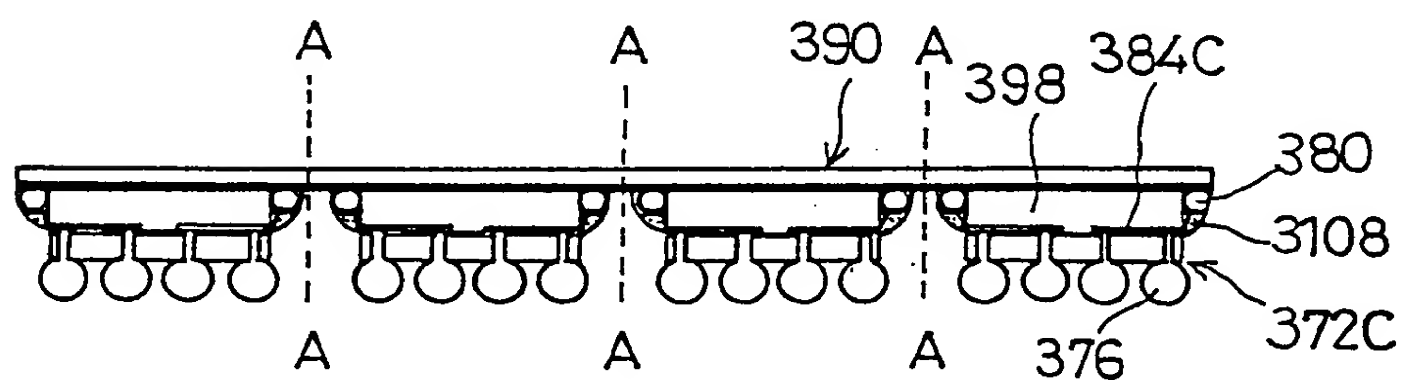


Fig. 170

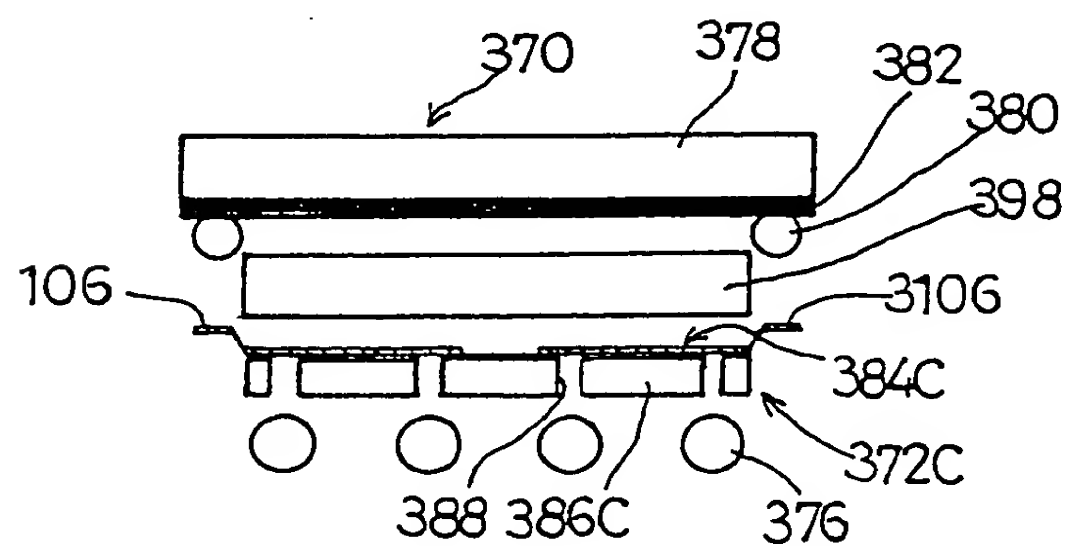




Fig. 171

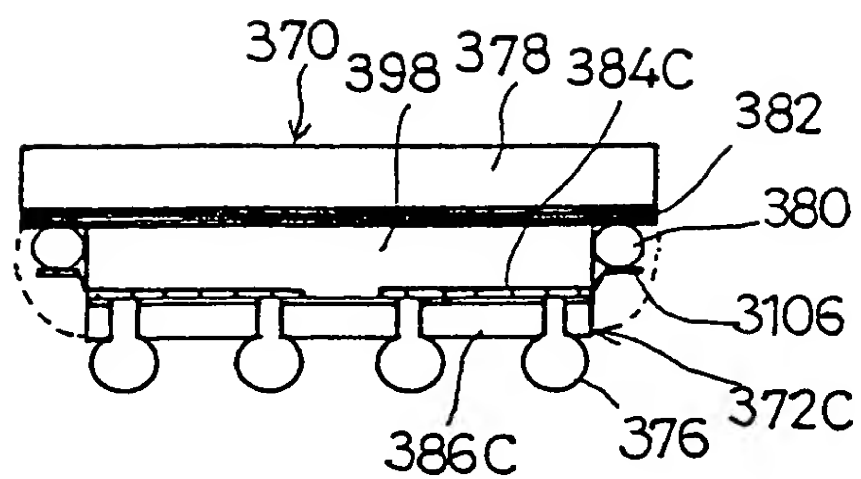


Fig. 172

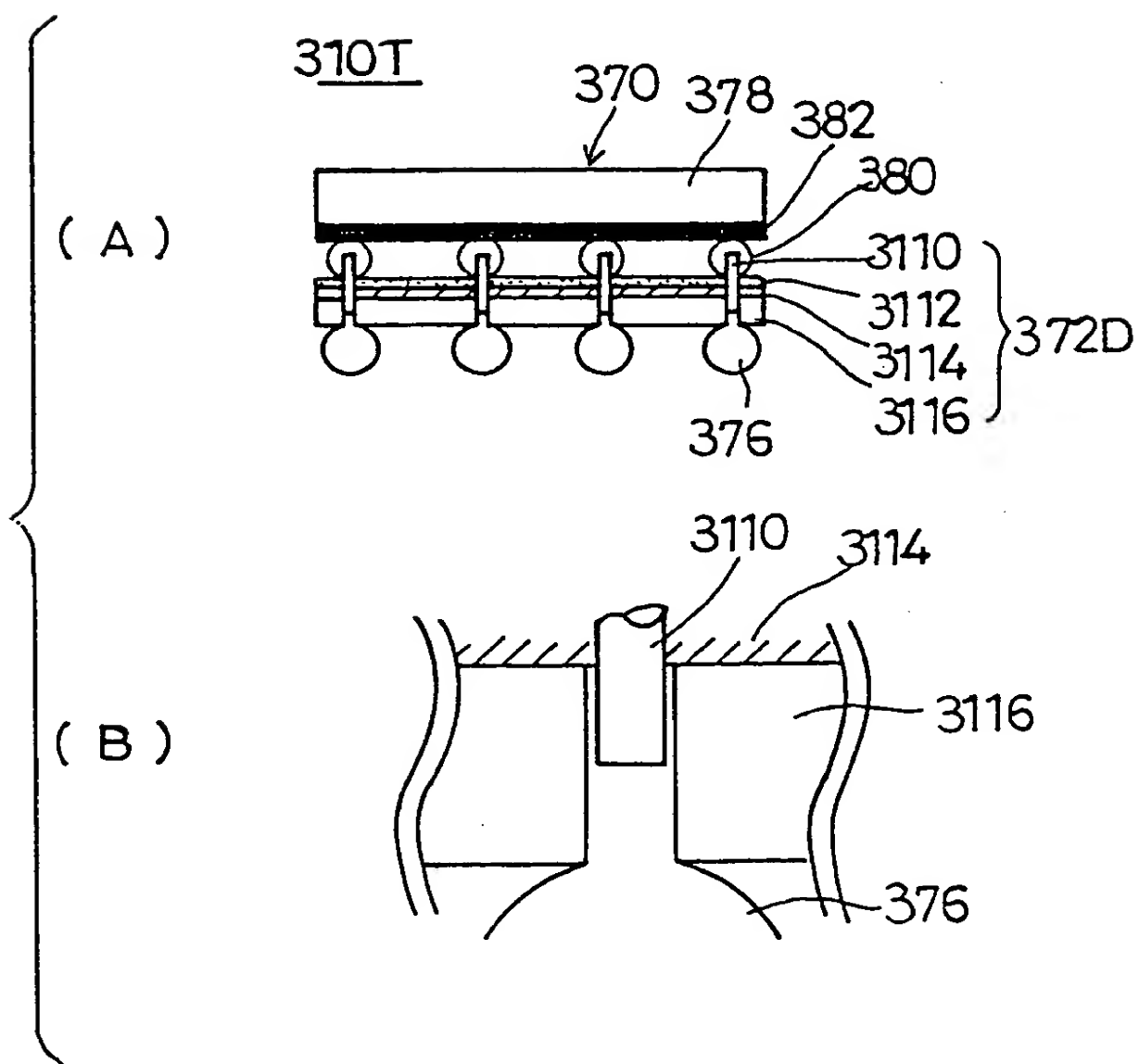


Fig. 173

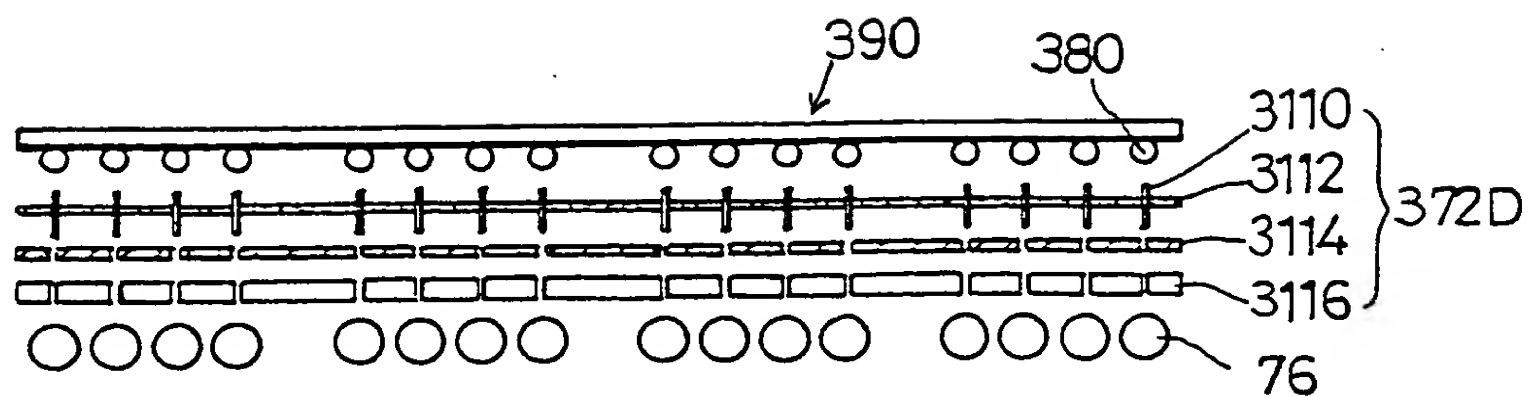


Fig. 174

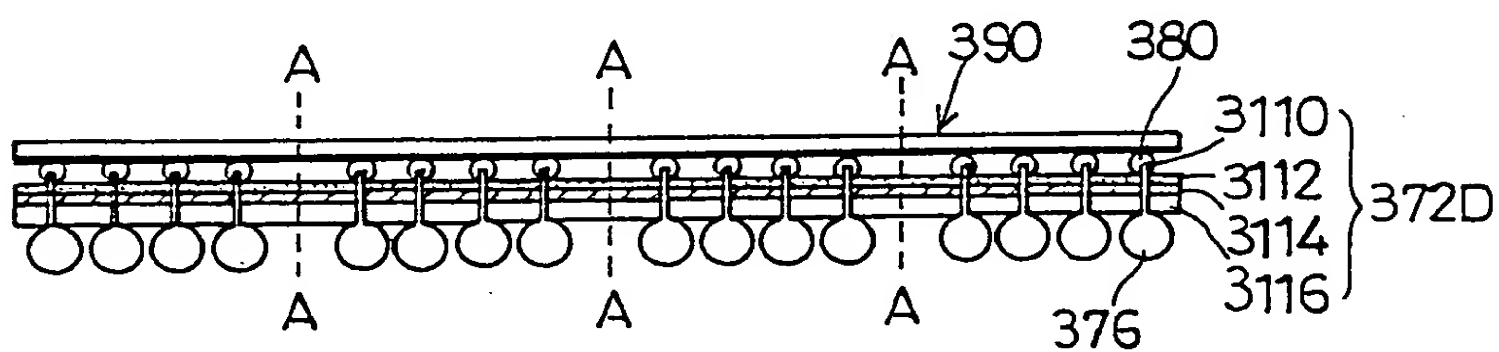


Fig. 175

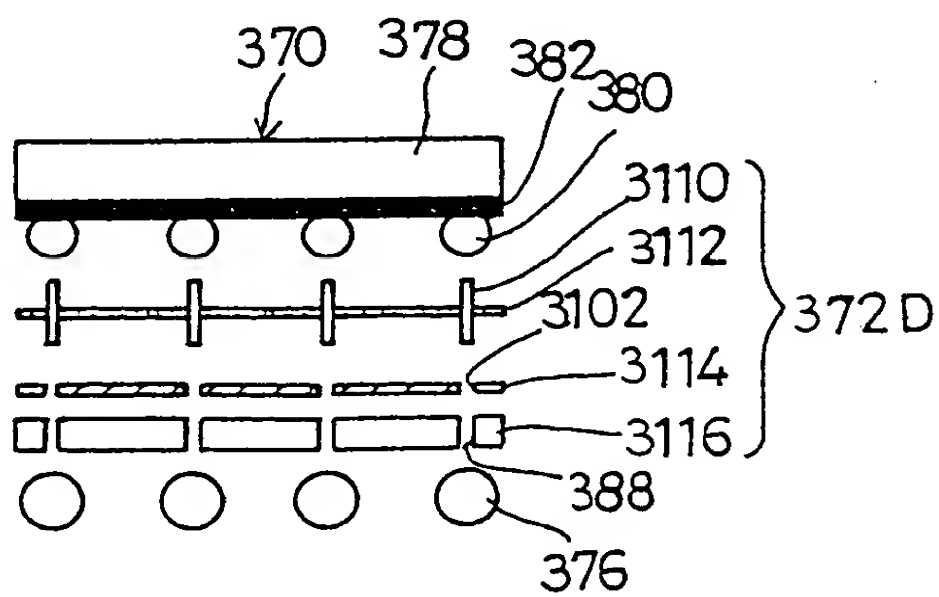


Fig. 176

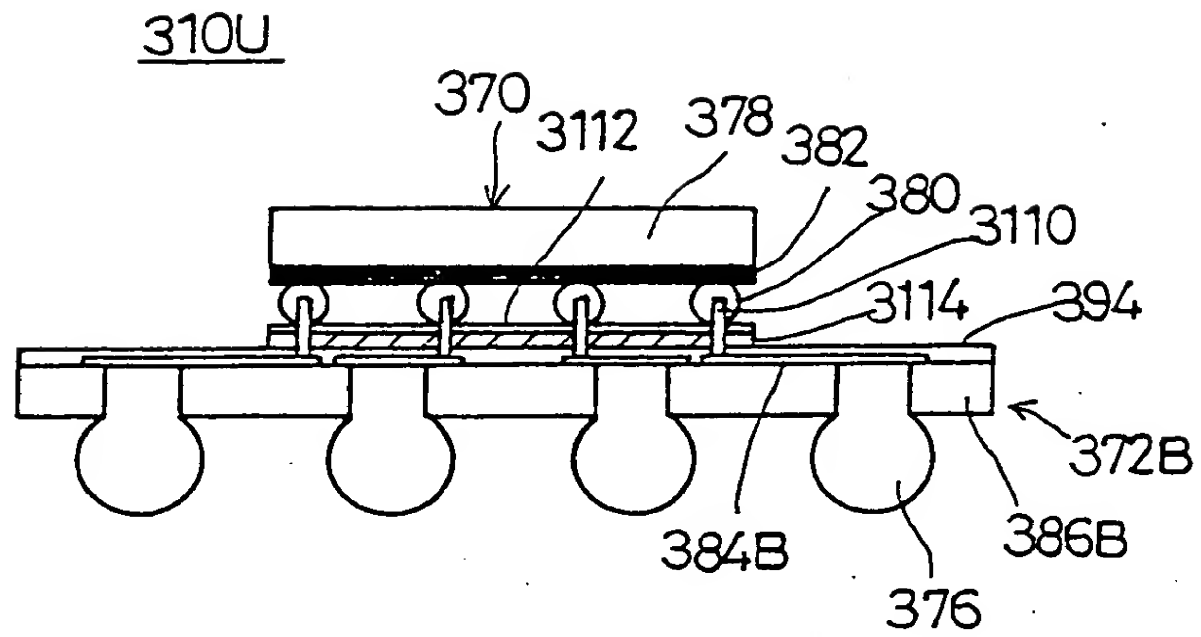


Fig. 177

